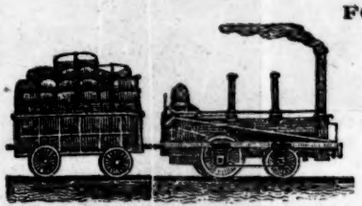
AMERICAN RAILROAD JOURNAL,

AND GENERAL ADVERTISER

FOR RAILROADS, CANALS, STEAMBOATS, MACHINERY, AND MINES.



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THE AMERICAN RAILROAD JOURNAL is the only periodical having a general circulation throughout the Union, in which all matters connected with public works can be brought to the notice of all persons in any way interested in these undertakings. Hence it offers peculiar advantages for advertising times of departure, rates of fare and freight, improvements in machinery, materials, as iron, timber, stone, cement, etc. It is also the best medium for advertising contracts, and placing the merits of new undertakings fairly before the public.

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TO IRON MANUFACTURERS. THE SUBscribers, as Agents of Mr. George Crane, of Wales, having obtained a patent in the United States for his process of smelting Iron Ore with Anthracite coal, and holding an assignment of the patent obtained by the late Rev. F. W. Geissenhainer, are prepared to grant licenses for the manufacture of Iron according to Mr. Crane's principle.

A. & G. RALSTON & CO.,
ja45 No. 4 Sout Fronth st., Philadelphia, Pa.

TO RAILROAD COMPANIES AND BUILDERS OF MARINE AND LOCOMOTIVE ENGINES AND BOILERS.

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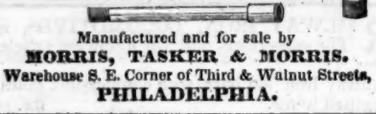
WELDED WROUGHT IRON TUBES

From 4 inches to ⅛ in calibre and 2 to 12 feet long, capable of sustaining pressure from 400 to 2500 lbs. per square inch, with Stop Cocks, T's, L's, and other fixtures to suit, fitting together, with screw joints, suitable for STEAM, WATER, GAS, and for LOCOMOTIVE and other STEAM BOILER FLUES.



Manufactured and for sale by
MORRIS, TASKER & MORRIS.
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TO IRON MASTERS.—FOR SALE.—MILL SITES in the immediate neighborhood of *Bituminous Coal* and *Iron Ore*, of the first quality, at Ralston, Lyoming Co., Pa. This is the nearest point to tide water where such coal and ore are found together, and the communication is complete with Philadelphia and Baltimore by canals and railways. The interest on the cost of water power and lot is all that will be required for many years; the coal will not cost more than $1 to $1 25 at the mill sites, without any trouble on the part of the manufacturer; rich iron ore may be laid down still more cheaply at the works; and, taken together, these sites offer remarkable advantages to practical manufacturers with small capital. For pamphlets, descriptive of the property, and further information, apply to Archibald McIntyre, Albany, to Archibald Robertson, Philadelphia, or to the undersigned, at No. 23 Chambers street, New York, where may be seen specimens of the coal and ore.

W. R. CASEY, *Civil Engineer*,

VALUABLE PROPERTY ON THE MILL Dam For Sale. A lot of land on Gravelly Point, so called, on the Mill Dam, in Roxbury, fronting on and east of Parker street, containing 68,497 square feet, with the following buildings thereon standing.

Main brick building, 120 feet long, by 46 ft wide, two stories high. A machine shop, 47x43 feet, with large engine, face, screw, and other lathes, suitable to do any kind of work.

Pattern shop, 35x32 feet, with lathes, work benches, &c.

Work shop, 86x35 feet, on the same floor with the pattern shop.

Forge shop, 118 feet long by 44 feet wide on the ground floor, with two large water wheels, each 16 feet long, 9 ft diameter, with all the gearing, shafts, drums, pulleys, &c., large and small trip hammers, furnaces, forges, rolling mill, with large balance wheel and a large blowing apparatus for the foundry.

Foundry, at end of main brick building, 60x45½ feet, two stories high, with a shed part 45½x20 feet, containing a large air furnace, cupola, crane and corn oven.

Store house—a range of buildings for storage, etc., 200 feet long by 20 wide.

Locomotive shop, adjoining main building, fronting on Parker street, 54x25 feet.

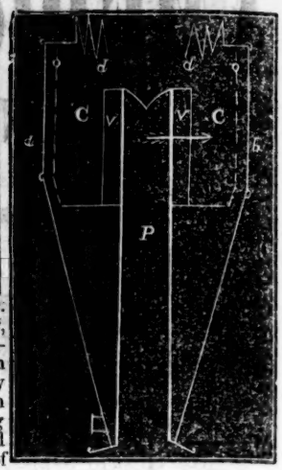
Also—A lot of land on the canal, west side of Parker st., containiug 6000 feet, with the following buildings thereon standing:

Boiler house 50 feet long by 30 feet wide, two stories.

Blacksmith shop, 49 feet long by 20 feet wide.

For terms, apply to HENRY ANDREWS, 48 State st., or to CURTIS, LEAVENS & CO., 106 State st., Boston, or to A. & G. RALSTON & Co., Philadelphia. ja45

FRENCH AND BAIRDS PATENT SPARK ARRESTER.



TO THOSE INTERESTED IN Railroads, Railroad Directors and Managers are respectfully invited to examine an improved SPARK ARRESTER, recently patented by the undersigned.

Out improved Spark Arresters have been extensively used during the last year on both passenger and freight engines, and have been brought to such a state of perfection that no annoyance from sparks or dust from the chimney of engines on which they are used is experienced.

These Arresters are constructed on an entirely different principle from any heretofore offered to the public. The form is such that a rotary motion is imparted to the heated air, smoke and sparks passing through the chimney, and by the centrifugal force thus acquired by the sparks and dust they are separated from the smoke and steam, and thrown into an outer chamber of the chimney through openings near its top, from whence they fall by their own gravity to the bottom of this chamber; the smoke and steam passing off at the top of the chimney, through a capacious and unobstructed passage, thus arresting the sparks without impairing the power of the engine by diminishing the draught or activity of the fire in the furnace.

These chimneys and arresters are simple, durable and neat in appearance. They are now in use on the following roads, to the managers and other officers of which we are at liberty to refer those who may desire to purchase or obtain further information in regard to their merits:

E. A. Stevens, President Camden and Amboy Railroad Company; Richard Peters, Superintendant Georgia Railroad, Augusta, Ga.; G. A. Nicolls, Superintendant Philadelphia, Reading and Pottsville Railroad, Reading, Pa.; W. E. Morris, President Philadelphia, Germantown and Norristown Railroad Company, Philadelphia; E. B. Dudley, President W. and R. Railroad Company, Wilmington, N. C.; Col. James Gadsden, President S. C. and C. Railroad Company, Charleston, S. C.; W. C. Walker, Agent Vicksburgh and Jackson Railroad, Vicksburgh, Miss.; R. S. Van Rensselaer, Engineer and Sup't Hartford and New Haven Railroad; W. R. M'Kee, Sup't Lexington and Ohio Railroad, Lexington, Ky.; T. L. Smith, Sup't New Jersey Railroad Trans. Co.; J. Elliott, Sup't Motive Power Philadelphia and Wilmington Railroad, Wilmington, Del.; J. O. Sterns, Sup't Elizabethtown and Somerville Railroad; R. R. Cuyler, President Central Railroad Company, Savannah, Ga.; J. D. Gray, Sup't Macon Railroad, Macon, Ga.; J. H. Cleveland, Sup't Southern Railroad, Monroe, Mich.; M. F. Chittenden, Sup't M. P. Central Railroad, Detroit, Mich.; G. B. Fisk, President Long Island Railroad, Brooklyn.

Orders for these Chimneys and Arresters, addressed to the subscribers, or to Messrs. Baldwin & Whitney, of this city, will be promptly executed.

FRENCH & BAIRD.

N. B.—The subscribers will dispose of single rights, or rights for one or more States, on reasonable terms. *Philadelphia, Pa., April* 6, 1844.

*** The letters in the figures refer to the article given in the *Journal* of June, 1844. ja45

S. VAIL, PROPRIETOR OF THE SPEEDwell Iron Works, near Morristown, N. J., can supply at short notice railroad companies and others with the following:

Wrought Iron Tyres made from the best iron and of any given diameter, and warranted to be sound in the welding. Railroad companies wishing to order, will be pleased to give the exact inside diameter or circumference to which they wish the tyres made, and they may rely upon being served according to order, and also punctually, a large quantity in the straight bar is kept constantly on hand. Crank axels for locomotive engines, made from the best Pennsylvania iron. Straight axles for locomotives for outside connection engines. Frames for engines. Wrought iron work for steamboats, and shafting of any size. Cotton Screws of any length or size. Railroad Jack screws, a late invention, and highly approved. Self-acting pumping apparatus for railroad water stations. He refers to the following gentlemen:

Baldwin, Vail & Hufty, Philadelphia; Wm. Norris, Philadelphia; N. Campfield, Savannah, Ga.; J. & S. Bones, Augusta, Ga.; D. F. Guez, N. Orleans, La.; Adam Hall, N. York; J. P. Allaire, N. York; William Parker, Boston, Mass.; George W. Schuyler, N. York. ja4c

THE NEWCASTLE MANUFACTURING Company continue to furnish at the Works, situated in the town of Newcastle, Del., Locomotive and other steam engines, Jack screws, Wrought iron work and Brass and Iron castings, of all kinds connected with Steamboats, Railroads, etc.; Mill Gearing of every description; Cast wheels (chilled) of any pattern and size, with Axles fitted, also with wrought tires, Springs, Boxes and bolts for Cars; Driving and other wheels for Locomotives.

The works being on an extensive scale, all orders will be executed with promptness and despatch. Communications addressed to Mr. William H. Dobbs, Superintendent, will meet with immediate attention. ANDREW C. GRAY,
ja45 President of the Newcastle Manuf. Co.

CUSHMAN'S COMPOUND IRON RAILS, etc. The Subscriber having made important improvements in the construction of rails, mode of guarding against accidents from insecure joints, etc.—respectfully offers to dispose of Company, State Rights, etc., under the privileges of *letters patent* to Railroad Companies, Iron Founders, and others interested in the works to which the same relate. Companies reconstructing their tracks now have an opportunity of *improving* their roads on terms very advantageous to the varied interests connected with their construction and operation; roads having in use flat bar rails are particularly interested, as such are permanently available by the plan.

W. Mc. C. CUSHMAN, *Civil Engineer*,
Albany, N. Y.

Mr. C. also announces that Railroads, and other works pertaining to the profession, may be constructed under his advice or personal supervision. Applicaitons must be post paid.

NICOLL'S PATENT SAFETY SWITCH for Railroad Turnouts. This invention, for some time in successful operation on one of the principal railroads in the country, effectually prevents engines and their trains from running off the track at a switch, left wrong by accident or design.

It acts independently of the main track rails, being laid down, or removed, without cutting or displacing them.

It is never touched by passing trains, except when in use, preventing their running off the track. It is simple in its construction and operation, requiring only two Castings and two Rails; the latter, even if much worn or used, not objectionable.

Working Models of the Safety Switch may be seen at Messrs. Davenport and Bridges, Cambridgeport, Mass., and at the office of the Railroad Journal, New York.

Plans, Specifications, and all information obtained on application to the Subscriber, Inventor, and Patentee. G. A. NICOLLS,
je45 *Reading, Pa.*

PILBROW'S ATMOSPHERIC RAILWAY.

We take the following from the London *Mechanics' Magazine.* The figure referred to is not necessary to obtain a correct idea of the principle of propulsion, so highly spoken of by the editor of the Magazine. We confess that we more than doubt its chances of ultimate success, especially with cog-wheels.

"Neither the extensive discussion which the atmospheric railway system has undergone, nor the brief experience which has been had of it on the Kingston and Dalkey line, can be said to have as yet established more, than that it is a practicable system for short lengths of railway, and as economical for such lengths as (but not more so than) any other. The objections advanced some six months ago by Mr. Robert Stevenson, to its applicability to long lines of large traffic, having many stages and crossings, remain in every material point, unanswered and unrefuted; for we cannot dignify with the name of answer or refutation, the mere verbal criticism, or worse vituperation, to which the assailants of the elaborate and masterly investigation by that gentleman have hitherto found it convenient to confine themselves.

"While such is still the state of things in regard to this question, Mr. Pilbrow has come to the rescue with a plan which promises so to improve the atmospheric system as to obviate all Mr. Stephenson's objections; and doubtless this is the best and most effectual way of meeting them. The 'continuous valve' of Messrs. Clegg and Samuda, which is the great source of waste of power, attending the system as now reduced to practice, Mr. Pilbrow dispenses with altogether. The 'discontinuance' of the main tube at every three mile station, which is another great defect, and the chief cause of the unfitness of the present system for long, main trunk lines, he renders also unnecessary; with him the continuity of the main, whatever may be its length, is unbroken, and other tubes may not only communicate with, but cross it at any place without the least interruption or inconvenience. He requires no section valves, bridges, etc., for crossings; no cranes, or other contrivances for lifting carriages on and off; and instead of a stationary engine every three miles, he requires but one every ten—probably fewer. All who are acquainted with the subject will at once admit that, if Mr. Pilbrow has in truth accomplished these things, he has done that for the atmospheric plan, which must advance it immeasurably beyond the point where it has been for some time stationary, and most probably make it no longer a matter of question that it is, for all situations, and under all circumstances, superior to the ordinary system.—We entertain ourselves a most favorable opinion of Mr. Pilbrow's invention. We have carefully investigated it in all its details, and can see no reason why it should not perform everything that is predicted of it. We have witnessed also an experimental trial of it, which, if there had been any doubts of its perfect practicability remaining in our minds, must have removed them completely. The scale of the trial, it is true, was a small one; but the practical facts demonstrated by it, were not of such a nature that any difference in magnitude could materially affect them."

"The manner of working the apparatus is as follows:—A pipe or tube, as before described, of sufficient diameter, being laid along in a hollow between the rails of a railway, and being exhausted of air by suitable means, and having the pinions arranged as described, at intervals throughout its length; the piston, with its rack attached, is placed in this tube at the further end from where the air has been or is being exhausted or withdrawn; the piston rack is put in gear with the pinions *inside the tube;* a railway carriage, having a carriage rack attached to it, as described, is placed upon the rails, as shown in fig. 10; this carriage rack being also in gear correspondingly with the upper part of the same pinions (that is to say, the relative position of each rack being the same, the piston rack being precisely under, and matching end to end with the carriage rack); the one rack cannot then move backwards or forwards without turning the pinions; and these being also in gear with the other rack, that must move also, and in the same direction. Therefore, if the vacuum has such an effect upon the piston that it advances, then will the rack upon the carriage be affected in the same way, by and through the medium of the pinions, and will advance also, and keep its relative situation exactly with the other. The racks being long enough to reach, as described, at least two pair of pinions at one time, the next in advance is acted upon before the one acting has ceased, and, therefore, as long as the power applied continues, and the piston advances, the carriage will do the same to the end of the tube; neither arriving before or after the other, but together, as they cannot separate, nor can one move or stop without the other.

"As it is necessary and important that the atmosphere should be admitted as nearly behind the piston as possible, the pinions are lifted up by the advance of the piston rack, and the air will enter through the space allowed by the lifting of the conical or flat portion of the arbor or axis of the pinion, as described; so that there would always be at least two or more such passages open, as the rack acts upon the one before it leaves the other. After the rack has passed by, the pinions by their own weight fall into their places, and thus make an air-tight tube ready for the next exhaustion, when, if an air pump be set to work at the other end, and the *direction* of the piston and rack changed, and placed again as before into proper gear, the carriage would *return* in like manner.

Fig. 10 represents a longitudinal elevation of a portion of an atmospheric railway of this description, crossed, *on a level*, by a roadway, and another line of atmospheric railway; from which it will be seen that there is plenty of space between the pairs of pinions for the crossing, and that the mains being sunk beneath the surface of the ground, or under the sleepers of the rails, they will be entirely out of the way, the carriage rack passing on from one pinion to another over such roads, without interfering. It will be obvious also, that where it may happen that two tubes are required to cross each other, one will pass beneath the other, the upper one keeping its level course, the lower one taking a gradual descent or dip under it, and the pinions keeping their necessary level at the upper part by being lengthened, at such a locality, in the axes and supports, as shown at *a*. The first, or rack carriage, of a train, is shown advancing upon this cross line as it would appear just previously to its taking the pinions at *a*.

As there will not be on this plan, even in a single line of rails, any discontinuance of the main tube but at a place arranged for trains to meet and cross, which will always be at a *station*, (and for general purposes probably not less than twenty miles apart,) it will be only at such places that the main would require any kind of valve to close its open end. The end of the main would simply require a disc of iron or wood placed against the open end, with a little composition to make an air-tight joint. When the vacuum is to be made up by the air pump, the disc or valve will fall or be pushed aside when the piston arrives at the end, and will require no more attention, excepting being replaced, or closing by the time this engine is again required to work.

"The piston would, when it arrives here either partially or wholly leave the tube, after displacing the disc or door by its remaining momentum, and the train with the carriage rack would pass on, and take one of the sidings, and be stopped by the attendants by brakes as usual; but the operation of the stopping would have been begun before arriving here, the train now only moving slowly, and with sufficient momentum to carry it to the place required, or middle of the siding. When the piston and rack reach the end of the main, and are out or withdrawn, it is proposed that there shall be placed, at each of the two ends of the mains, a receptacle or trough, mounted upon four wheels or rollers, so that the piston coming on to it, could be immediately removed for inspection, etc., and another piston, newly greased, etc., brought and placed (by the same means) with its head in the tube ready for the next returning train. The trains having both arrived, each train would be (by any suitable means) urged on to the commencement of the opposite main, where the fresh pistons having been already inserted (and held by any convenient contrivance) and the vacuum formed, the carriage rack coming into gear with the first pair of pinions, and the piston released, the train would start on its journey. Thus the pistons would neaer leave the main, or enter another, but at a very slow pace, and at a place for stopping. The same piston would not be required to go on the whole journey, but a fresh one every 20 miles, leaving the other to be examined, &c.

"Mr. Pilbrow observes that ropes or bands of leather may be substituted for the racks—'varying the surface accordingly.' For our own parts we are inclined to think that it will ultimately be found that neither cogged-

wheels nor racks are requisite for the proper working of this system; and that the propulsion of the carriages may be effected by the simple adhesion of plain surfaces; that is to say, that the tube piston, the pinions, and carriage piston, may all be plain, and that by the friction of each against the other, the desired progression will be produced. Should this prove to be the case, we shall then but have a repetition as regards the atmospheric system, of the same thing which took place on the first introduction of railways. Nobody at one time, supposed that a plain wheel would move forward on a plain rail; or that it could be made to advance otherwise than by the help of cogs or grippers of some sort or other. A single trial of the force of simple adhesion dispelled the illusion, and cogs and grippers were no more heard of.

"Mr. Pilbrow calculates that the 'total saving (from his system) for 100 miles per annum in working, as compared with the estimated cost by the present atmospheric system,' would amount to not less than £53,-303. The correctness of this estimate may possibly admit of question; but that there must be a very considerable saving resulting from the supercession of so many of the expensive and wasteful adjuncts of the present system, cannot reasonably be doubted. The following observations by Mr. Pilbrow, touching one point of this question of economy, are too important to be omitted.

"The reason why a less number of carriages will be required on this plan is, that there being no long valve here, the leakage will be so diminished that it will amount to less in ten miles than in one; it is estimated that now the leakage equals 5-horse power per mile,* and therefore, should there be but one engine to ten miles of main, 50-horse power out of the 100 would be lost for leakage alone; so it is found absolutely necessary to have one engine every 3 miles, thus reducing the loss to 15-horse power out of the 100. Why the pinion valves as proposed will not leak so much as the long valve is, first, because the surfaces are ground truly, and are pressed together by the weight and fall of the pinion (and the more used, the better they will stop); and secondly, on account of the small quantity of surface or space *that can leak*, the proportion being as 1 to 20 between the two systems, for the pinion valve or seat being but about 9 inches in circumference at the aperture where the air is admitted, and there being only two of them to every thirty feet of main=1·5 feet, whereas, the present long valve would be the whole *thirty feet* exposed, and liable to leakage; hence, even were the pinion valves to leak as much as the long valve, *surface for surface*, this plan would only leak 2½-horse power instead of 50-horse power, in 10 miles.

"Mr. Pilbrow's patent and pamphlet include also a scheme of a pneumatic telegraph (to be combined with atmospheric railway;) dependent on the rise and fall of columns of mercury, when acted on by air exhausters; but in this we do not see anything new. Such a mode of telegraphic communication has been often before proposed."

RAILROAD MEETING.

At a meeting of the citizens of the county of Broome, friendly to the construction of the New York and Erie railroad within the southern tier of counties, and opposed to the building of said road, or any part of it, in the State of Pennsylvania, held at the house of Edwin Northrup, in Harpersville, on the 30th day of January, 1845, Robert Harper was chosen president, and Luther Badger, Lewis Northrup, Elias Patrick and Jas. B. Frazier, vice presidents, and Timothy Ruggles and Hial Edgerton, secretaries.

The meeting was then eloquently addressed by several gentlemen, upon the subject of all terations in the charter of said company, permitting it to make parts of said road in the State of Pennsylvania, and showing the injustice that would result to a large portion of the inhabitants of several counties of the southern tier, should our legislature grant by enactment such alterations in the charter of said company. After which the committee on resolutions reported the following resolutions, which were unanimously adopted.

Resolved, That our confidence in the value and utility of the New York and Erie railroad remains undiminished.

Resolved, That where our interests, and the interests of so large a number of citizens of this State, amounting to *one-sixth* of the large number to be benefitted by the construction of this road, and that to make an alteration in the route of the road which would not reduce the distance or expense in building said road more than the one-hundredth part, are involved, we will not stand by and see this great injustice take place, but we repose with undiminished confidence in the integrity and wisdom of our legislature to protect our rights, and the rights of the State, from this attempt of interested men to wrest the same from us, to promote their own private ends.

Resolved, That our confidence in the ability and disinterestedness of purpose which influence the decisions of the company, and prompt her to ask for this alteration, is very much impaired.

Resolved, That if it should prove true (which we do not believe) that the company cannot go on with the construction of the road without the proposed alterations being made, and if it should prove true that the recent subscriptions to the capital stock of the company were based upon the condition, that the company obtain leave to build parts of their road in Pennsylvania, then we, uninfluenced by personal considerations would respectfully ask the State to absolve themselves from all connection with the said company, trusting rather to await the time when the State may be in a condition to revive this much needed work, than longer to depend upon the frail promises, so often made, and as often broken by the company.

Resolved, That the proceedings of this meeting be published in the papers of Broome, Chenango, Otsego, Delaware and Sullivan counties.—*Binghampton Courier.*

MADISON AND INDIANAPOLIS RAILROAD.—From what we learn from various quarters, we are inclined to think that the railroad will speedily be completed. We speak advisedly, when we say, that we do not believe that a more profitable investment for capital can be found in the State. Of its benefit to the State at large, and to southern and central Indiana in particular, none who have examined the subject can for a moment doubt. Severe lessons have been taught our people; and they seem not to have lost their effect on the *managers* of public works. Hence we now see them advancing with prudence and caution, yet steadily. In this way, they are gaining the confidence of the people; and instead of the wild recklessness of former days, the interest of all is carefully studied. We have several letters on the subject, which want of space prevents our noticing at this time, except to give the following extract from one of them.—*Indiana Sentinel.*

"I feel a deep interest as a large stockholder in the completion of this road to your place, and shall contribute the little aid in my power to produce so desirable a result.

"I can speak for the directors and other stockholders, that the entire energies of the company will now be directed to the immediate completion of the road. We are greatly encouraged to do so in the late act of the legislature, which, while it gives great advantages to the stockholders, in the end will enure to the advantage of the State.

"We can now offer the best of security to the lenders of money, viz: the entire road, with the cars, locomotives, depots, etc., which cost the State some sixteen hundred thousand dollars, and the company about two hundred thousand—in all, one million, eight hundred thousand dollars.

"We have just received on of Baldwin & Whitney's best locomotives, warranted to draw 250 tons on level, and 30 tons up the plane at this place. This additional power so much needed, will add greatly to the receipts of the company, and the usefulness of the road. * * * *

"In this matter, Indianapolis and Madison have a common interest, and we ought to work together."

The total quantity of iron of every description shipped on the State works of Pennsylvania in 1844 was 70,000 tons, but there was probably a considerable amount made in the State which never touched the public works. Hence we are unable to state the actual quantity of iron manufactured: still it would appear certain that the above amount of 70,000 tons must include the bulk of the trade. Of this a large portion was pig iron, and as no less than 13,500 tons were imported in 1844, it would appear that even Penn-

sylvania, with duties from 60 per cent. upwards, is still unable to supply the demand at home, no less than 1000 tons of pig having been imported. The increase in rolled bars of common dimensions and of railroad iron is very great, though the duty on the latter article amounted to nearly a quarter of a million of dollars.

Statement of Foreign Iron imported at Philadelphia during the last five years.

Names of Articles.	1840. Tons	1841. Tons	1842. Tons	1843. Tons	1844 Tons
Iron, Railroad..	1433	4117	1101	989	8863
" Rolled bar	492	1428	1287	1280	2733
" Hammered, Rod, Sheet, and Hoop	459	197	631	95	590
" Pig	76	68	294	15	999
" Old and Scrap	29	42	15	11	11
" Castings	91	223	152	69	147
" Chain cables & an.	50	15	4	24	143
Steel	88	226	195	120	143

LONG ISLAND RAILROAD.

In December, 1843, the board announced to the stockholders, that vigorous measures were in progress for the completion of the eastern part of the railroad, extending from Suffolk station to Greenport, a distance of 52 miles. They have now the pleasure to apprise them that the entire line is opened, and has been in successful operation through its whole extent since the 29th day of July last.

Cost of the Railroad.—The entire cost of the road, tunnel, equipments, surplus iron, steamers, and other appurtenances to this date is $1,884,640.12. A small balance only will be required for the completion of the tunnel and the payment for some additional cars and motive power.

The eastern half of the Long Island railroad has been constructed at an extremely low cost. The contracts were made when wages and materials were at the lowest point, and the easy character of the country presenting no natural difficulties, has favored a very moderate outlay. The entire cost of this portion of the line, exclusive of cars and engines, but inclusive of depots, land and track, will not materially vary from $10,000 a mile.

In no part of the work has the cost materially exceeded the estimate, but the construction of the tunnel, the purchase of steamers, and extra cars, and engines, have swelled the expenses of the company beyond the original computation of the board, but bring with them benefits greatly exceeding the outlay.

Capital.—The capital consists of 29,846 shares of $50 each, or $1,492,300.

The whole debt of the company is $392,340.22. Deducting from this the debt due the State of New York, in the year 1861, of $100,000, with a sinking fund of $1,000 per annum, leaves the remaining debt of the company $292,340.22, payable in the following years—1845, 1846, 1847, 1848, 1849, 1850, 1851, 1852.

The entire aggregate of debt and capital stock, is $1,884,640.22.

It is, also, proper to remark in this connection, that a most equitable claim for more than $112,000 exists against the government of the United States for the remission of the duty on the iron imported for the track, and your directors do not despair of obtaining a recognition of this claim.

This work, in a national point of view, is important to the post office department, the defence of the coast, and the connection of the north and south; the fact that such remission will not now operate to exclude foreign iron and thus stimulate the home manufacture, and that nearly every railroad in the country has imported its iron *duty free*, show the injustice and impropriety of subjecting this iron to a duty exceeding 100 per cent. upon the prime cost of the article. Planned and chartered as this enterprize was, and partly finished while there was no duty on railroad iron, and suspended in consequence of the reverses of the country, it may be well urged, that there is an implied obligation on the part of congress to impose no new or unexpected burthen on a great public undertaking.

Construction.—The railroad has been finished with a heavy and permanent H rail, laid principally on Chestnut ties, at the rate of 2,000 to the mile, with sub-sills, and a deep gravel foundation, and is now in excellent condition. The company have a surplus of two hundred and fifty tons of iron that may be sold at a profit. They have constructed extensive piers at Brooklyn and Greenport, running to deep water, and under the authority of the city government of Brooklyn, have constructed a tunnel under Atlantic street, through the heights of Brooklyn.

The Tunnel.—The whole length of this structure is little more than half a mile. The walls are of massive stone, of the thickness of six feet, and ten feet high. The arch is of brick, twenty-two inches thick, the whole laid in hydraulic cement. The width of the tunnel is 21 feet, and height 18 feet. The estimated cost of this work, before its commencement, was $75,000. The cost of the work thus far has been $51,352.10; and although in daily use for trains, it is not entirely finished; but it is now ascertained that $15,000 more will be ample for its completion—making the actual cost $66,352.10. This great work, which has materially contributed to swell the cost of the line, and was not contemplated at the date of the last report, will greatly facilitate the operations of the company, obviate many dangers, and as a work of art will embellish the city of Brooklyn. It will greatly reduce the expense of the company, and enable it to conduct its freight traffic on a scale of expenditure much below what would have otherwise been incurred.

Engines and Cars.—The equipment of the line with respect to engines and cars appears to give general satisfaction. The engines are of the most approved pattern and of the greatest efficiency, while the cars are as perfect as the advanced state of the arts and the competition of the most eminent builders can render them. In the freight department a considerable accession of cars is expected in a few days, and business daily offers for their employment.

Running of the Road.—In the report of December, 1843, while the line was still incomplete, a confident opinion was expressed that the line—95 miles—would be run over within four hours, and the entire distance between New York and Boston, including the Greenport ferry, accomplished within ten hours. With respect to the Long Island railroad, more than this has been accomplished. The run has been made within three hours, and the average time of the through train, stopping twice to wood and water, has not materially varied from three hours and forty minutes. This is accomplishing more in speed than had previously been effected on the continent of America. The crossing of the ferry from Greenport to Norwich and Stonington has been made in all weathers, with the utmost certainty—240 passages having been made without a failure. The time occupied has been about 2½ hours, and occasionally less than two hours. The trains on the Eastern roads, connecting with this line, have not run with a speed equal to the expectations of the company—having averaged usually not far from five hours in one direction and four and a half in the other, making the average time nearly ten and three quarter hours. It is, however, confidently believed that more perfect arrangements will be made the present year, which will bring the entire journey between Boston and New York within ten hours. The average time, by the fastest competing line is about fourteen hours. It is also hoped that under new arrangements, hours may be selected more adapted to the convenience of the travelling public than those which have thus far been preferred by the eastern railroads in connection with this company, and your directors confidently rely on the co-operation of the able and experienced managers of those lines in measures which must alike benefit the associated companies and the public.

The late period last summer at which this road was opened left it out of the power of the board to develope its capabilities to their full extent, as a part of the line of railways upon our sea board, for the transmission of passengers and freight.

The lines of steamers through the sound, olaimed, and perhaps justly, the continuance of their lines through the season, sharing, however, with the Long Island railroad company, in fair proportion, their income. During the approaching season it is contemplated to run, in connection with the eastern roads, both a day and night line, the former leaving Portland at 6 o'clock in the morning, Boston at 12, (after much of the business of that place is over,) and to reach New York at 10 o'clock in the evening. Returning eastward, it is intended to leave N. York at 12 o'clock in the day and at 7 in the evening, affording in the one case a day line for the pleasure travel and in the other to the man of business an opportunity to pass between New York and Boston without interfering with the usual business hours.

ENGLISH RAILROAD SHARE-LIST.

NAME OF RAILWAY.	Miles opened.	Total sums, in pounds, authorized to be raised by shares.	Total sums, in pounds, authorized to be raised by loan or mortgage.	Total sums, in pounds, expended at dates of latest balance sheets.	Cost of working Fin pounds for six months as stated in latest balance sheets.	Total earnings, in pounds, for six months as stated in latest balance sheets.	Dividend at last meeting. Per share. £	s.	d.	Per cent. per annum. £	s.	d.	Paid on share.	Value of share.
Arboath and Forfar	15	102,000	35,000	138,870	.....	.....	0	12	6	2	10	0	25	27
Birmingham and Gloucester	55	1,187,500	407,336	1,500,806	39,261	53,203	1	5	0	2	10	0	100	100
Brandling Junction	23	161,700	365,470	481,452	.....	.....	.....			4	10	0	50	54
Bristol and Gloucester	37½	400,000	211,000	.....	.....	.....	.....			nihil.			30	36
Chester and Birkenhead	14½	750,000	143,170	518,980	5,856	13,148	0	8	6	1	14	0	50	32
Dublin and Drogheda	31	450,000	150,000	500,869	.....	.....	.....			nihil.			55	72
Dublin and Kingston	6	200,000	152,200	359,000	.....	.....	6	0	0	6	0	0	100	166
Dundee and Arbroath	16¾	100,000	49,445	153,416	2,989	6,993	1	5	0	5	0	0	25	29
Durham and Sunderland	18¾	169,350	124,055	270,392	9,889	17,702	.....			nihil.			34	29
East County and North and East	86½	4,443,200	1,341,155	3,931,905	47,385	118,726	1	6	6	.....			45	57
Edinburg and Glasgow	46	1,125,000	375,000	1,649,523	29,429	55,866	1	2	6	4	10	0	50	57
Glasgow, Paisley and Ayr	51	937,500	.....	1,066,951	12,446	36,736	1	2	6	4	10	0	50	60
Glasgow, Paisley and Greenock	22½	650,000	216,666	787,884	11,572	23,177	0	5	0	2	0	0	25	12
Grand Junction	104	2,478,712	.....	2,453,169	84,309	195,080	5	0	0	10	0	0	100	210
Great North of England	45	969,000	581,017	1,262,518	12,201	36,189	1	12	6	3	5	0	100	119
Great Western	221¾	4,650,000	3,679,343	7,272,539	132,235	369,904	3	10	0	7	0	0	75	138
Hartlepool	15½	438,000	155,540	719,205	.....	.....	.....			8	0	0	100	...
Leicester and Swannington	16¼	140,000	.....	140,000	2,207	6,317	1	5	0	5	0	0	50	...
Liverpool and Manchester	32	1,209,000	497,750	1,739,835	57,239	117,559	5	0	0	10	0	0	100	203
Llanelly	27	200,000	44,000	221,624	.....	.....	1	0	0	2	0	0	87	...
London and Birmingham	12½	6,874,976	1,928,845	6,393,468	92,823	405,768	.....			10	0	0	100	218
London and Blackwall	3¾	804,000	266,000	1,315,640	15,978	23,870	.....			.....			16	6
London and Brighton	56	1,793,800	998,350	2,630,451	29,372	84,880	0	12	0	2	8	0	50	47
London and Croyden	8½	550,000	229,000	761,885	7,583	10,545	0	5	0	2	10	0	14	17
London and Greenwich	3¾	759,383	233,300	1,040,930	15,193	28,933	.....			nihil.			13	10
London and South Western	92¾	2,222,100	630,100	2,596,291	68,457	150,469	1	12	6	6	10	0	41	73
Manchester and Birmingham	31	2,100,000	690,586	1,923,699	15,397	58,162	1	0	6	5	0	0	40	48
Manchester and Bolton	10	778,100	197,730	773,743	8,585	21,140	2	2	0	4	10	0	93	110
Manchester and Leeds and Hull	81	2,937,500	1,943,932	3,921,593	46,653	156,761	.....			7l. & 10l.			60	88
Midland railway	178½	5,158,900	1,719,630	6,279,056	76,983	281,898	.....			.....			100	96
Newcastle and Carlisle	61	878,240	188,563	1,135,069	26,499	73,947	4	0	0	4	0	0	100	105
Newcastle and Darlington	23	500,000	.....	405,728	.....	.....	.....			nihil.			21	49
Newcastle and North Shields	7	150,000	153,876	309,629	8,943	18,466	.....			2	0	0	50	37
North Union	39	739,201	308,306	1,015,447	9,071	37,794	2	10	0	6	16	8	100	104
Paris and Orleans	82	1,600,000	400,000	1,978,415	.....	.....	0	16	0	8	0	0	20	39
Paris and Rouen	84	1,440,000	.....	.....	31,247	91,171	.....			8	0	0	20	38
Preston and Wyre	19	830,000	179,852	355,161	4,191	7,066	.....			nihil.			50	18
Sheffield and Manchester	19	1,150,000	311.759	951,455	11,895	14,876	.....			nihil.			82	93
South Eastern	88	2,996,000	1,530,277	3,464,172	40,993	81,482	0	10	6	2	2	0	50	39
Taff-Vale	30	465,000	154,785	590,006	8,509	18,414	1	0	0	6	5	0	100	55
Ulster	25	519,150	20,000	348,626	5,401	13,856	0	15	0	5	1	8	29	37
Yarmouth and Norwich	20½	187,500	62,500	230,250	.....	.....	.....			nihil.			16	25
York and N. Mid. and Leeds and Selby	28	1,062,500	167,500	676,644	27,132	55,752	2	10	0	10	0	0	50	100

NEW AND PROPOSED RAILWAYS.	Share Capital.
Aberdeen	1,600,000
Barnsley Junction	200,000
Belfast and Ballymena	385,000
Blackburn and Accrington	400,000
Birk. and Ches. Junction	1,000,000
Bolt., Wigan and Liverpool	800,000
Caledonian	1,800,000
Cambridge and Lincoln	1,250,000
Chatham and Portsmouth	5,000,000
Chester and Wrexham	120,000
Churnet valley	1,800,000
Direct Northern to York	4,000,000
Dublin and Belfast	950,000
Dundee and Perth	250,000
Edinburg and Northern	800,000
Ely and Bedford	270,000
Glosgow, Dum. & Carlisle	1,300,000
Gt. South and West Ext	1,200,000
Gt. Grimsby and Sheffield	600,000
Harwich and E. coun. Jun.	160,000
Huddersfield & M. rl. & cl.	600,000
Kendal and Windermere	125,000
Leeds and Dewsbury	400,000
Leeds and Thirsk	800,000
Liv. Ormskirk and Preston	600,000
London and Portsmouth	1,750,000
London and York	5,000,000
Londonderry & Enniskillen	500,000
Lynn and Ely	200,000
Manchester, Bury and Ross	300,000
Manchester and Buxton	250,000
Mullingar and Athlone	.....
Newcastle and Berwick	700,000
Richmond & W. End Junc.	.....
Scottish Central	700,000
Sheffield and Lincolnshire	650,000
Shrewsbury and Gd. Junc.	400,000
Shrew. Wolv. Dudly & B.	900,000
Trent Valley	900,000
West London Extension	64,000
West Yorkshire	1,000,000
Whitehaven and Maryport	100,000
FRENCH RAILWAYS.	
Boulogne and Amiens	1,500,000
Central of France	1,280,000
Lyons and Avignon	2,400,000
Orleans, Tours & Bordeaux	2,000,000
Paris and Lyons	2,500,000
Paris and Orleans	1,600,000
Paris and Rouen	1,440,000

Steam and Miscellaneous.

NAME OF COMPANY.	Num. of shares.	Am't. of share.	Amount paid.	Div. p.c. per ann.	Last price.	Present price.
Anglo Mexican Mint	10,000	10	10	.....	15⅞	15⅞
Anti Dry Rot	10,000	.....	18¾	.....	2	.....
Australian Trust Company	5,700	100	35	.....	34½	.....
General hteam Navigation	20,000	15	14	10	27½	27
Gt Western Steam Pa	.....	.....	100	.....	25	.....
Metropolitan Wood Pav	15,000	10	6	5	6¾	.....
Patent Elastic Pav	10,000	1	1	5	1¼	.....
Peninsular and Oriental	11,493	50	50	7	64¼	65
Ditt	3,200	50	40	7	.....	.....
Polytechnic Institution	.....	.....	.....	6	.....	.....
Reversionary Int. Soc	5,3	100	100	4½	104	104
R. Mail Steam Packet	15,000	100	60	.....	36½	37
South Western Steam	4,000	25	5	.....	.....	.....
Ship Owners' Towing	3,000	10	7½	10	15	.....
Thames Tunnel	4,000	50	50	.....	.....	.....
University College	1,500	100	100	.....	.....	.....

Canals.

Ashby de la Zouch	1,432	113	av.	4	70	70
Barnsley	720	100	100	14	180	180
Birmingham, 1-16 share	3,000	118¾	79	10	150	160
Do. and LiverpoolJunction	4,000	160	100	.....	13½	13½
Coventry	500	100	100	20	365	365
Cromford	460	do.	do.	24	250	250
Derby	600	do.	do.	9	105	105
Erewash	231	do.	do.	32	440	440
Forth and Clyde	1,297	400½	40½	4	440	440
Grand Junction	11,600	100	100	7	162	161½
Grand Surrey	1,500	do.	do.	.....	20	.....
Gloucester and Rerkley	5,000	do.	do.	.....	8	8
Grantham	749	150	150	8	185	185
Lancaster	11,699	47½	47½	3	40	40
Leeds and Liverpool	2,897	100	100	34	640	640
Liecester	545	140	140	9	139	139

NAME OF COMPANY.	Num. of shares.	Am't. of share	Amount paid.	Div. p.c. per ann.	Last price.	Present price.
Loughborough	70	142¾	142½	70	1140	...
Monmouthseire	2,469	100	100	10	160	160
Melton Mowbray	250	100	100	10	117	117
Mersey and Irwell	500	100	100	10		
Macclesfield	3,000	100	100	2½	15	15
Neath	247	100	100	17	365	365
Oxford	1,786	100	100	30	505	
Regents or Loncon	21,418	33¾	33¾	2⅜	25	25
Shropshire	500	125	125	6	120	120
Somerset coal	800	150	150	7½	123	123
Stafford and Worcester	700	140	140	25	480	480
Shrewsbury	500	125	125	12	230	230
Stourbridge	300	145	145	14	360	360
Stroudwater	200	150	150	19		
Swansea	533	100	100	15	240	240
Severn & Why & Rail Av.	3,762	26½	26½	5½	30	30
Trent and Mersey	2,600	50	50	65	495	
Thames and Medway	8,149	19¼	19¼	.....	10	10
Warwick and Birmingham	,000	100	100	10½	167	
Warwick and Napton	980	100	100	8½	122	

Water Works.

Birmingham	4,800	25	25	3½	28	28
East London	4,433	100	100	8	223	225
Grand Junction	5,500	av.	41 2-3	7½	88	90
New River L. B. Ann	1,500			2½		
Manchester and Salford	6,486	av.	30	8⅛	57	57
Vauxhall, lt. S. London	1,000		100	5	55	55
West Middlesex	8,294	av.	63½	6⅛	126	127

Docks.

Commercial Dock	1,065	100	100	3	80	
East and West India		sto.		5½	137	
London	3,238,310	sto.		4½	114¾	115
St. Katharine	1,352,752	sto.		5	116	171
Southampton	7,000	50	50			

AMERICAN STATE WORKS AND CANALS, ETC.

		STATE WORKS.	Length in miles.	Cost.	1843. Income.	1843. Expend.	1844. Income.	1844. Expend.
N. Y	1	Black river canal—(including 4 y'rs' def.)	35	2,066,285	.....	.....	.....	.....
"	2	Cayuga and Seneca—(do. 14 years' def.)	21	419,830	16,557	10,953	.....	.....
"	3	Champlain canal	64	1,257,604	102,308	.....	.....	.....
"	4	Chemung—(do. 11 years' deficiencies)	23	1,012,685	8,140	14,486	.....	.....
"	5	Chenango—(do. 7 years' def.)	97	3,267,590	16,195	15,967	.....	.....
"	6	Crooked lake—(do. 10 years' def.)	8	263,950	461	3,674	.....	.....
"	7	Erie—enlargement of	363	20,435,406	1,880,316	.....	.....	.....
"	8	Genessee valley—(do. 5 years' def.)	120	4,167,846	.....	.....	.....	.....
"	9	52 miles opened, cost $1,500,000	.....	.....	12,292	13,819	.....	.....
"	10	Oneida lake—(do. 4 years' def.)	6	85,082	225	2,239	.....	.....
"	11	Oswego—(do. 14 years' def.)	38	882,399	29,147	22,742	.....	.....
Pa	12	Beaver division canal	25	.....	.....	.....	7,381	5,386
"	13	Delaware canal	60	.....	.....	.....	109,278	22,870
"	14	French creek	45	.....	.....	.....	.....	.....
"			.....	.....	.....	.....	.....	.....
"	15	Columbia railroad	82	.....	.....	.....	443,336	205,067
"	16	Eastern division	36	.....	.....	.....	179,781	138,915
"	17	Juniata canal	39	}				
"	18	Portage railroad	130	}	.....	.....	.....	351,102 248,943
"	19	Western division canal	105	}				
"	20	North branch Susquehannah canal	73	}				
"	21	West " " "	72	}	.....	.....	.....	101,949 57,633
"			.....	.....	.....	.....	.....	.....
Ohio	22	Hocking canal	.....	947,670	4,757	.....	4,926	.....
"	23	Miami canal	.....	1,660,742	68,640	38,826	74,904	.....
"	24	Miami extension	.....	2,949,250	8,291	.....	12,053	.....
"	25	Muskingum	.....	1,602,018	23,167	.....	28,241	.....
"	26	Ohio	310	4,600,000	322,754	123,398	338,267	.....
"	27	Wabash	.....	2,955,270	35,922	6,400	49,267	.....
"	28	Walhonding	.....	607,269	838	39,005	1,918	.....
"	29	Western road	.....	255,014	7,254	1,782	5,817	.....
Ind.	30	Sundry works	.....	11,000,000	.....	.....	.....	.....
"	31	Maume canal	.....	.....	.....	.....	.....	.....
Ill.	32	Sundry works	.....	10,000,000	.....	.....	.....	.....
Mich	33	Central railroad	110	1,842,308	149,987	75,960	211,170	89,420
"	34	Southern railroad	68	936,295	24,064	7,907	60,341	70,000

The State Canals are all 4 feet deep, and the locks are 13 to 17 feet wide, and 80 to 90 feet in length.

In the estimate of cost no interest is allowed on the yearly deficiencies, nor are the six millions paid from auction and salt duties included, principal or interest. The Genessee valley and Black river canals require large sums for their completion, the interest of which *additional* sum is much greater than the estimated gross income of these canals when finished. The sums required to complete these two canals are $2,000,000 and $600,000, making their total cost when finished $5,553,000 and $2,409,000; an expenditure incurred on estimated incomes (admitted to be liberal,) of $39,000 and $14,000 respectively.

The total receipts from the works of Pennsylvania for 1843 were $1,019,401; for 1844 $1,164,326, and the cost about 30 millions.

The receipts for 1844 were as follows:

Canal tolls,	578,404
Railroad tolls,	252,855
Motive power,	319,590
Trucks,	13,477

of which $585,922 is from 118 miles of railroad, and $578,404 from 550 miles of canal.

The canals of Ohio are supported by a property tax of 5½ mills on the dollar. There are 853 miles of canal in the State, which yielded in 1843 $471,623, and in 1844 $515,393, the cost, 1st Jan. '43 being $15,577,233. The increase of '44 over '43 is only $43,770, though the year '44 has exhibited a greater increase throughout the country than ever before known.

These 21 millions on sundry works yield no income whatever.

The central railroad yields above 6 per cent., and is the only State work—the Erie canal excepted—which is able to stand alone.

	CANALS.	Length in miles.	Cost.	1843. Income. Gross.	1843. Income. Nett.	Div. per cent.	1844. Income. Gross.	1844. Income. Nett.	Div. per cent.	Value of stock.
	Blackstone	.....	.....	.....	.....	....	.....	.....	....	.....
	Bald Eagle Navigation	25	400,000	.....	.....	....	.....	.....	....	.....
	Beaver and Sandy, (part)	.....	1,000,000	.....	.....	....	.....	.....	....	.....
	Charleston, (S. C.)	.....	.....	.....	.....	....	.....	.....	....	.....
	Chesapeake and Ohio	184	12,370,470	47,637	.....	....	.....	.....	....	.....
	Conestota	12	300,000	.....	.....	....	.....	.....	....	.....
	Delaware and Chesapeake	13	.....	.....	.....	....	.....	.....	....	26
	Schuylkill	108	3,500,000	279,795	102,221	....	190,693	120,624	....	31
	Farmington	.....	.....	.....	.....	....	.....	.....	....	.....
	James river and Kenhawa	.....	.....	.....	.....	....	.....	.....	....	.....
	Middlesex	.....	.....	.....	.....	....	.....	.....	....	.....
	Port Deposit	10	200,000	.....	.....	....	.....	.....	....	.....
	Delaware and Raritan	43	2,900,000	99,623	53,327	....	.....	.....	....	.....
	Southwark	.....	300,000	.....	.....	....	.....	.....	....	.....
	Tide Water	45	2,900,000	.....	.....	....	.....	.....	....	.....
	Union	80	2,000,000	.....	.....	....	.....	.....	....	.....
	Morris	101	1,000,000	.....	.....	....	.....	.....	....	28
	Dismal Swamp	.....	.....	.....	.....	....	.....	.....	....	.....

REMARKS.

We may, perhaps, at some future time be enabled to give the particulars of all these canals.

The Chesapeake and Ohio canal is not yet completed to the coal mines, hence its trifling income.

The enlargement of the Schuylkill canal has been commenced.

The Morris canal was lately sold for one million, about one-fourth of its cost. It is said in the papers that it is to be enlarged. We have seen no report, nor heard of the appointment of any engineer.

CANADIAN CANALS.	Length in miles.	No. of locks.	Lockage in feet.	Size of locks. Length of chamber.	Size of locks. Width.	Size of locks. Depth on mitre sill.	Width of canal. Bottom.	Width of canal. Surface.	Estimate.	Expended to Sept. 1843.	1843. Income.	1843. Expense.
The Welland canal	.....	.....	.....	feet.	feet.	feet.	feet.	feet.	3,948,572	2,485,572	64,658	1,169
Main trunk from Port Colborne to Port Dalhousie	28	31	328	150	26 1-2	8 1-2	45	81	.....	.....		
Junction branch to Dunville (not added)	21	1	6	150	26 1-2	8 1-2	35	71	.....	.....		
Broad creek branch to Port Maitland (below.)	1 1-2	1	6	200	45	9	45	85	.....	.....		
The St. Lawrence canal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Galops and Port Cardinal	2	2	7	200	45	9	50	90	.....	.....		
Rapid Plat	4	2	11 1-2	200	45	9	50	90	672,498	973		
Farren's point	3-4	1	3 1-2	200	45	9	50	90	.....	.....		
Cornwall, passing the Long Sault rapids	11 1-2	7	48	200	55	9	100	150	865,372	1,665,663		
Beauharnois, do. Coteau, Cedars and Cascades road	11 1-4	9	82 1-2	200	45	9	80	120	1,190,087	275,426		
Lachine, do. Lachine rapids	8 1-2	5	44 1-2	200	45	9	80	120	old canal.	400,000	29,288	9,011
Elargement of do.	.....	.....	.....	.....	.....	.....	.....	.....	1,001,333	64,439		
Total from lake Erie to the sea	12	57	525									
Chambly	66	9	74	120	24	6	36	60	200,000	440,000	1,409	1,096

	COAL COMPANIES.	Length in miles. R. rd.	Length in miles. Canals.	Cost.	1843. Income. Gross.	1843. Income. Nett.	Div. per cent.	1844. Income. Gross.	1844. Income. Nett.	Div. per cent.	Value of stock.	REMARKS.
	Delaware and Hudson	16	108	2,800,000	930,203	196,702	10	.....	.....	....	117	
	Lehigh	20	72	6,000,000	.....	.....	....	.....	.....	....	31	

AMERICAN RAILROADS.

		RAILROADS.	Length in miles.	Cost.	Loans and debts.	Number of shares.	Paid on share	1843. Income. Gross.	1843. Income. Nett.	Div. per cent.	1844. Income. Gross.	1844. Income. Nett.	Div. per cent.	Previous prices	Shares	Price
Me.	1	Portland, Saco and Portsmouth	50	1,200,000	.....	.....	....	89,997	47,166	7	124,497	74,841	6	100	39	98½
N. H.	2	Concord	35	750,000	.....	.....	....	.....	.....	....	.....	.....	12	130	50	130
Mass.	3	Boston and Maine	56	1,384,050	.....	.....	....	178,745	68,499	6	.....	.....	....	109½	2	109½
"	4	Boston and Lowell	26	1,863,746	.....	.....	....	277,315	144,000	8	316,969	147,615	....	121	7	121½
"	5	Boston and Providence	41	1,900,000	.....	.....	....	233,388	110,823	6	.....	.....	....	107	42	106½
"	6	Boston and Worcester	48	2,914,078	.....	.....	....	404,141	162,000	6	428,437	195,163	....	118¾	70	117¾
"	7	Berkshire	21	250,000	.....	.....	...	.....	17,500	7	.....	.....	....	.....	.....	.....
"	8	Charlestown branch	.....	250,000	.....	.....	....	.....	.....	13	.....	.....	....	.....	12	80
"	9	Eastern	54	2,388,631	.....	.....	....	279,563	140,595	6	337,238	227,920	8	107	122	107¾
"	10	Fitchburg	50	322,538	.....	.....	....	.....	.....	....	.....	.....	....	111	19	112½
"	11	Hartford and Springfield	25 1-2	.....	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	12	Nashua and Lowell	14 1-2	380,000	.....	.....	....	84,079	.....	8	.....	.....	....	120	.....	.....
"	13	New Bedford and Taunton	20	428,543	.....	.....	....	50,671	24,000	6	.....	.....	....	.....	.....	.....
"	14	Norwich and Worcester	59	2,166,566	.....	.....	....	162,336	24,871	....	230,674	.....	3	70½	5,632	72
"	15	Taunton branch	11	250,000	.....	.....	....	.....	20,000	8	.....	.....	....	118	.....	.....
"	16	West Stockbridge	3	.....	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	17	Western, (117 miles in Mass.,)	156	7,686,202	4,686,202	30,000	100	573,882	284,432	....	753,753	439,679	....	99½	239	99
"	18	Worcester branch to Milbury	.....	5,500	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
Con.	19	Hartford and New Haven	38	.....	.....	.....	....	.....	.....	....	.....	.....	....	92	63	100
"	20	Housatonic, (10 months,)	74	1,244,123	.....	.....	....	.....	.....	....	150,000	.....	....	30	.....	.....
"	21	Stonington, (year ending 1st Sept.,)	48	2,600,000	.....	.....	....	113,889	.....	....	154,724	79,845	....	41	3,875	41½
N. Y.	22	Attica and Buffalo	31 1-2	268,275	.....	.....	....	45,596	7,522	....	.....	.....	....	.....	.....	.....
"	23	Auburn and Rochester	78	1,727,361	.....	.....	....	189,693	112,000	....	.....	.....	....	107	50	107
"	24	Auburn and Syracuse	26	743,931	.....	.....	....	86,291	27,334	....	.....	.....	....	.....	.....	.....
"	25	Buffalo and Niagara	22	200,000	.....	1,500	133½	.....	.....	....	.....	.....	....	100	.....	.....
"	26	Erie, (446 miles,)	.....	5,000,000	.....	.....	....	.....	.....	....	.....	.....	....	29½	1,180	29½
"	27	Erie, opened	53	.....	.....	.....	....	.....	48,000	....	.....	.....	....	.....	.....	.....
"	28	Harlem	26	2,200,000	.....	.....	....	.....	.....	....	.....	.....	....	70	850	71
"	29	Hudson and Berkshire	.....	.....	.....	.....	....	.....	.....	....	.....	.....	....	.....	25	14½
"	30	Long Island	95	1,884,640	392,340	29,846	50	.....	.....	....	153,456	70,043	....	76	6,545	77¼
"	31	Mohawk	16 3-4	1,030,949	.....	.....	....	69,948	58,780	....	84,306	40,000	....	63	456	65½
"	32	Tonnawanda	43	600,000	.....	.....	....	76,227	.....	....	.....	.....	....	.....	.....	.....
"	33	Troy and Greenbush	6	180,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	34	Troy and Saratoga	25	475,865	.....	.....	....	44,325	21,000	....	.....	.....	....	.....	.....	.....
"	35	Troy and Schenectady	20 1-2	633,520	.....	.....	....	28,043	.....	....	.....	.....	....	.....	.....	.....
"	36	Schenectady and Saratoga	22	300,000	.....	.....	....	42,242	3,000	1	.....	.....	....	.....	.....	.....
"	37	Utica and Schenectady	78	2,124,013	.....	.....	....	277,164	180,000	9	.....	.....	....	131	.....	.....
"	38	Utica and Syracuse	53	1,080,219	.....	.....	....	163,701	72,000	....	.....	.....	....	119	.....	.....
N. J.	39	Camden and Amboy	61	3,200,000	.....	.....	....	682,832	383,880	....	.....	.....	....	105½	9	107½
"	40	Elizabethtown and Somerville	26	500,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	41	Morris and Essex	.....	.....	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	42	New Jersey	34	2,000,000	.....	.....	....	.....	.....	....	.....	.....	....	98	65	94
"	43	Paterson	16	300,000	.....	.....	....	.....	.....	....	.....	.....	....	80	.....	.....
Pa.	44	Beaver Meadow	26	1,000,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	45	Cumberland Valley	46	1,250,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	46	Franklin	10 1-2	.....	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	47	Harrisburg and Lancaster	36	860,000	.....	.....	....	.....	.....	....	.....	.....	....	30	.....	.....
"	48	Hazleton branch	10	120,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	49	Little Schuylkill	29	900,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	50	Lykens Valley	16 1-2	.....	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	51	Mauch Chunk	9	100,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	52	Minehill and Schuylkill Haven	18	315,000	.....	.....	....	.....	.....	12	.....	.....	....	144	.....	.....
"	53	Norristown	20	800,000	.....	.....	....	.....	.....	....	.....	.....	....	10	.....	.....
"	54	Philadelphia and Trenton	30	400,000	.....	.....	....	.....	.....	....	.....	.....	....	105	.....	.....
"	55	Pottsville and Danville	29 1-2	1,500,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	56	Reading	94	9,457,570	7,447,570	40,200	50	.....	.....	....	597,613	343,511	....	45	3,560	50
"	57	Schuylkill valley	10	1,000,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	58	Williamsport and Elmira	25	400,000	.....	.....	....	20,000	.....	....	.....	.....	....	.....	.....	.....
"	59	Philadelphia and Baltimore	93	4,400,000	.....	.....	....	43,043	200,000	....	.....	210,000	....	41	6,805	43
Del.	60	Frenchtown	16	600,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
Md.	61	Baltimore and Ohio, (1st Oct.)	188	7,623,600	.....	.....	....	575,235	279,402	....	558,620	346,916	....	48½	12	49¼
"	62	Baltimore and Susquehanna	58	3,000,000	.....	.....	....	.....	.....	....	.....	.....	....	5	.....	.....
"	63	Baltimore and Washington	38	1,800,000	.....	.....	....	177,227	71,691	....	212,129	104,529	....	84	.....	.....
Va.	64	Greensville and Roanoke	17 1-2	260,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	65	Petersburg and Roanoke	60	766,000	.....	.....	....	.....	.....	....	.....	.....	3	.....	.....	.....
"	66	Portsmouth and Roanoke	78 1-2	850,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	67	Richmond and Fredericksburg	61 1-2	1,200,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	68	Richmond and Petersburg	22 1-2	700,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	69	Winchester and Potomac	32	500,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
N. C.	70	Raleigh and Gaston	84 1-2	1,360,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	71	Wilmington and Raleigh	161	1,800,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
S. C.	72	South Carolina	136	5,299,224	.....	34,410	75	.....	.....	....	.....	.....	8	.....	.....	.....
"	73	Columbia	66					201,464	77,456	....	328,425	180,704	....	55	.....	.....
Ga.	74	Central	190	2,581,72[illegible]	.....	.....	....	227,532	93,190	....	.....	.....	....	.....	.....	.....
"	75	Georgia	147 1-2	2,650,000	.....	.....	....	248,026	158,207	....	248,096	147,523	....	.....	.....	.....
Ala.	76	Tuscumbia	46	.....	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
Ky.	77	Lexington and Ohio	40	500,00[illegible]	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
Ohio	78	Little Miami	40	450,00[illegible]	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	79	Mad river	10	400,00[illegible]	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	80	Monroeville and Sandusky	.....	.....	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
Mich.	81	Detroit and Pontiac	25	.....	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
"	82	Erie and Kalamazoo	33	.....	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
Ind.	83	Madison and Indianapolis	56	152,000	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....	.....
Can.	84	Champlain and St. Lawrence	15	212,000	.....	.....	....	.....	12,000	....	58,000	24,000	....	110	.....	.....

We particularly request statements of the traffic of each week and of the corresponding week of last year to be regularly sent to us.

Correspondents will oblige us by sending in their communications by Monday morning at latest.

PRINCIPAL CONTENTS.

AMERICAN RAILROAD JOURNAL.

PUBLISHED BY D. K. MINOR, 23 Chambers street, N.Y.

Thursday, February 20, 1845.

WESTERN RAILROAD.—Receipts for the week ending February 8:

	1845.	1844.
Passengers, - -	$3,697	$3,296
Freight, etc., -	3,450	4,493
Total, - -	$7,147	$7,789

Few freight trains were run last week, on account of the storm.

HARTFORD AND NEW HAVEN RAILROAD.—Receipts for Jan. 1845, exclusive of mails, - $17,703 46
do. 1844, " " - - 7,100 63
Increase, - - - - 10,602 83

It will be seen that the extension of the road to Springfield has added 149 per cent. to the receipts, over the corresponding month of last year.

The earnings exhibit an increase beyond any estimate that had been formed.—*Hartford Courant.*

MINEHILL AND SCHUYLKILL HAVEN RAILROAD.—The following is the amount of coal transported over this road, for the week ending on Wednesday evening last: 1,854·02
Per last report, - - 22,214·11
Total, - - - 31,068·13

THE COAL TRADE.—Sent by railroad up to Thursday evening last.—*Miners' Journal.*

Schuylkill Haven, - -	2,640·14
Pottsville, - - -	1,398·01
	40,29·15
Per last report, - -	31,662·06
	35,692·01

NEW YORK AND ERIE RAILROAD.

In another page will be found extracts from the Binghampton Courier, and the views of the meeting with reference to the confidence to be placed in the company, are only too general throughout the southern counties. They make no distinction between the present and the previous directions and would appear to regard the sale of the work by the State, as the most advisable course under all circumstances. For they cannot imagine that there is any probability of this or any other work being undertaken by the State, if they give the least attention to public opinion not only here, but also in the east and west. *If* the State should re-commence the construction of public works, then have the southern counties unquestionably the first claim; but such a remote contingency has little interest. It will be observed that the meeting "does not believe" that a location of part of the line out of the State is necessary; a position in which they are greviously in error, as we have understood from the very best authority. They may, and with justice, say that the circumstance of the road being confined to the State of New York by the charter, and operations on a large scale having been commenced under that charter, a pledge was virtually given to them that the road was to be kept entirely within the State of New York. This is a question of good faith on the part of the company, which we cannot undertake to discuss now. If the inhabitants of some of the southern counties should succeed in defeating the application of the company, they will only stop the work, injure others and themselves too; for we take it that any location is preferable to no road at all. Again, if the road be sold, it will pass into the hands of those who will select the best line, and, as that line is unquestionably in Pennsylvania, for a considerable distance, they will gain nothing by their present opposition. We are no apologists for the company, but taking things *as they are*, we would respectfully, but earnestly, entreat the friends of the New York and Erie railroad to withhold all opposition to any measure calculated to forward the work—above all to its location in Pennsylvania, which is, we repeat, indispensable.

☞ In looking over the list of stopping places on some of the great thoroughfares, we found that tabular advertisements, in the style of that of the New Jersey railroad company, would occupy too much space. We therefore present the following table of the fares and distances on the Long Island railroad, and would observe that if each company would insert a similar advertisement in the Journal, they would confer a great favor on the travelling public and themselves, besides increasing the capability and efficiency of a Journal devoted to the cause of all public improvements—railroads especially.

LONG ISLAND RAILROAD.

NAMES OF PLACES.	DISTANCE FROM. Brooklyn. Miles.	Place to place. Miles.	Greenport. Miles.	FARE from Brooklyn. Dolls. Cts.
Brooklyn	.....	.....	95	.....
Bedford	2½	2½	92½	12½
East New York	5	2½	90	12½
Union course	7½	2½	87½	18¾
Trotting course	8½	1	86½	18¾
Jamaica	11	3½	84	25
Brushville	14	3	81	37½
Hempstead branch	18	4	77	43¾
Carl Place	20	2	75	43¾
Westbury	23	1	72	50
Hicksville	26	6	69	56¼
Farmingdale	31	5	64	68¾
Deerpark	37	6	58	87½
Thompson	41	6	54	1 00
Suffolk station	44	7	51	1 12½
Lake road	48	4	47	1 31
Medford station	55	11	40	1 50
St. George's Manor	67	12	28	1 75
Riverhead	74	7	21	2 00
Jamesport	79	5	16	2 00
Mattetuck	84	10	12	2 00
Cutchogue	88	4	7	2 12½
Southold	91	7	4	2 12½
Greenport	95	4	.....	2 25

Trains leave Brooklyn at 7½ a.m., for Greenport and Boston; at 9½ a.m. and 3½ p.m., for Hicksville and intermediate places, and at 9½ a.m. Tuesdays, Thursdays and Saturdays, for Greenport and intermediate places. Leave Greenport (Boston train,) 1 p.m. and 9 a.m., for Brooklyn and intermediate places on Mondays, Wednesdays and Fridays.—Leave Hicksville at 7 a.m. and 1½ p.m. for Brooklyn and intermediate places. Monday, Wednesday and Friday, via Norwich. Tuesday, Thursday and Saturday, via Stonington.

SAFETY SWITCH.

We call the attention of railroad companies to Mr. Nicoll's patent safety switch, a model of which may be seen at our office. The object is described in the advertisement; but we may here observe that a train, intended for the main track, and running off on a turn-out, owing to neglect in the switch-tender, will come on the main track again without injury, on the ordinary plan, *if* the switch at the other end be also set for the the turn-out; otherwise the train runs off. Now, with the safety switch, the train is *always* sure to come on the main track, without reference to the position of the safety switch, after being thrown on the side track by neglect. In the night time, with heavy trains especially, this is all important, for it is generally too late to stop the train before reaching the lower switch when the train runs off the track with the ordinary arrangement.

READING RAILROAD.

In our last we gave the report of the Reading company at length. The large amount invested, the very contradictory opinions entertained as to its capabilities, and the circumstance of its being the only freight road of great length in this country combine to give general interest to this work. Using round numbers the gross income for 1844 was $600,000, the expenses $250,000, and the net income nearly $350,000, on an expenditure of $9,500,000, equal to 3½ per cent. The road was in full operation only part of the year. The company estimate the receipts of 1845 at about $1,100,000 and the quantity of coal to be transported at 800,000 tons, the amount carried over the Stockton and Darlington road in England. This will be nearly twice the business of 1845 and, allowing twice the amount of expenses to cover renewals as well as repairs, the net income would be $600,000, or 6 per cent on the total cost of the road. We trust that twelve months hence we may be able to announce this gratifying result.

☞ We are indebted to Harace Williams, Esq., treasurer of the Boston and Worcester railroad company, for the last report of that corporation; also to George Bliss, Esq., president of the Western railroad company, for their report for 1844. We give extracts from them both, and shall probably continue them in the next number. The controversy between these two companies is of the utmost importance to Massachusetts, and cannot be regarded with indifference by any company or even individual interested in railroads. In another number we shall refer to the rates of fare and freight on the Western railroad.

For the American Railroad Journal.

In your Journal of yesterday you give the cost of the State lateral canals of New York, including deficiencies. The deficiencies being the interest on their cost and repairs, deducting receipts, compounded at an annual interest of about 6 per cent.

Now will you be kind enough to publish the cost of the Erie canal in the same way, adding in *deficiencies.*

Also the cost and deficiencies of the following railroads, viz: New York and Erie, Hudson and Berkshire, Harlem, Long Island, Mohawk and Hudson, Troy and Saratoga, Troy and Schenectady, Ithaca and Owego, Canajoharie and Cattskill, Saratoga and Schenectady, in this State; and the far famed Reading railroad, in Pennsylvania; computing the interest on their cost, in calculating deficiencies, at 6 per cent. and on loans at the amount paid, and much oblige FAIR PLAY.

The interest on the deficiencies of the the canals is not compounded. The comptroller published a statement of the income and debts of the Erie canal, allowing compound interest on both, a few years since, to which we refer our correspondent.

We must also remind him that there is a vast difference between the Troy and Reading roads and the others. The former roads do not inflict their losses on the *community;* if the latter gain, *they* pocket the profit, if they lose *we* pay, which is not fair play, according to our ideas.

BEAUTIES OF GOVERNMENT ENGINEERING.

Under this head we will occasionally give our readers such information as may be necessary to a pretty thorough understanding of the extraordinary system of political jobbing, which, acting under the specious title of "internal improvements," has loaded many of the States with debt and disgrace, and has put back for many years the construction of works of real utility. To judge from the remarks in the public prints, one would suppose that the State works of Ohio were equal or superior to the private works of Massachusetts. In our first number of this year we gave our views pretty plainly on the miserable results of the Ohio canals. The re-report of the commissioners, for 1844, we have just received from Leander Ransom, Esq., also from J. W. Erwin, Esq., and there is nothing in them to change our opinions—for the better. The cost of the canals is $15,677,435, the gross income for 1844 was $527,515, the expenses were $197,442, and the nett income, $330,073. The annual deficiency is about $600,000, which is, as our readers well know, paid by a property tax of 5½ mills on the dollar, nearly twice as much as would have saved the honor of Pennsylvania, and five time as much as has been paid for a few years for a similar purpose in New York, and which comparatively trifling imposition has created vast dissatisfation—more especially in the agricultural districts.

But passing by all objections as to knowledge of the resources of the country, and engineering skill, in the higher departments of the profession more particularly, it appears that that most necessary of all ingredients—common honesty—has been in many instances entirely omitted. We give extracts from two highly respectable Ohio papers published at the flourishing cities of Sandusky and Columbus, the latter the seat of government of the State.

"*The Board of Public Works.*—Among the letters of inquiry which we receive, as to what the legislature is doing, no subject is oftener mentioned than the board of public works. An indefinite impression of great abuse in that department of the public service prevails; and this is not confined to party lines, nor has it arisen from party prejudice entirely. Men of all parties speak plainly in relation to the management of, and expenditures on our public works. Take the expenditures on the Ohio canal, from Portsmouth to Cleveland, for the past season. We find this put down in the report of the board, in exact numbers, at *one hundred and ten thousand six hundred and seventy-nine dollars and six cents!* for superintendence and making ordinary and *extraordinary* repairs—with the addition of 2,530 dollars 66 cents to engineers and for *incidental* expenses—making a total of $113,309 72, or near *three hundred and forty* dollars per mile for *repairs, etc.!!*

"Now, this may be all right, but the people want some evidence of it. Nothing but a thorough examination and sifting of the accounts and doings of this board, will quiet the public mind. If the session of the legislature does not furnish the time, or if the means cannot be come at in Columbus for such an examination, let a committee be appointed to sit during the recess. Something must be done or blame will be attributed to the majority of the people's representatives."—*Ohio State Journal.*

"*Ohio Legislature.*—On the 22nd ult., Mr. Archbold submitted to the house of representatives a preamble, reciting that suspicions existed that abuses had been practiced in the management of the public works, by which the State has sustained great loss and injury, and closing with the following resolution:

"*Resolved*, That the committee on finance be instructed to inquire into the expediency of passing a statute, to secure a thorough investigation of the abuses aforesaid, and of the whole system of our public works, either by a committee of the general assembly, to sit during the recess, or by a commission of other citizens, or in any other manner they may deem best, with leave to report by bill or otherwise; and that it be recommended to said committee, in case they should deem it expedient to report by bill, to give to the investigators all the aid which statute law can give, consistently with the principles of equity, of justice and of the constitution.

"The resolution was adopted—yeas 65, nays none. What else could be expected from a system commenced in injustice, for selfish and local objects, than it should be conducted in a fraudulent manner, and end in the robbery and distress of the people?"—*Sandusky Clarion.*

A late Montreal paper furnishes the following "gem" in its account of parliamentary proceedings:—

"Hon. receiver general submitted a message from the governor general, with a large mass of documents, connected with outrages committed in the neighborhood of certain public works now in progress, and recommending some more effectual means of affording protection to her majesty's subjects in their lives and property than was now possessed by the government or magistrates. He moved also that some of them be read, which was done. The honorable gentleman then stated that those read were only a sample of what the bundle contained. They were a mere specimen of outrages unparalleled in any civilized country, and a disgrace to humanity. From the papers submitted some idea might be formed of the trouble the government have had for the last two months and a half. And those disgraceful outrages were still going on. The contractors had been brought to a stand still, and were afraid of their lives, the people in the vicinity had been robbed, their houses plundered, and travellers stopped on the highways. But it was impossible to identify the guilty, and the outrages could not be put a stop to in the present state of the law, without a large military force. It was therefore for parliament to say what was to be done. *His own opinion was that the works should be stopped*, and ample power given to magistrates and the government to put an end to the horrible state of affairs."

The passage we have italicised contains the gist of the matter, and unquestionably gives the wishes of the governor as well as of the receiver general. If once stopped *we* in New York know that the resumption will not take place in a hurry. We are only astonished that it was not recommended by the governor long since. While getting rid of the "canallers" the government will be enabled to cast off that incubus the board of works, and apply the little means left to some honest and respectable purpose. We suspect that personal motives are not without influence in the Receiver General. The organ of self esteem must rise in rebellion when "the honorable gentleman" reflects for a moment on his own position at a Board, presided over by an engineer whose "professional career" is so long that its commencement is lost in obscurity.

The brilliant success which has attended the affair of the Beauharnois canal has led others to try their hands, and one of the most prominent appears to be an "honorable gentleman" who acted a part—subordinate it is true—but still very important in the above procuration.

"Mr. Gowan brought in his motion calling for an inquiry into the conduct of the board of works, with relation to the improper rejection of tenders, and also with regard to the charge of accepting bribes from contractors and others. There was an immense deal of angry discussion about this business. Mr. Gowan asserted that in one instance £300 was given to a person connected with the board; and that a situation of £500 per annum was offered to Mr. Merritt, M. P. for Lincoln, for his co-operation with the board, both in and out of parliament. This charge Mr. H. Merritt most vehemently denied, but admitted that a proposition of some kind had been made to him, but not from the board of works."—*St. Catharine's Journal.*

The Montreal Gazette of the 23d says:—

"We understand that the committee on the North Lincoln petition, have virtually sustained the sitting member, Mr. Merritt, by deciding in his favor the most important question; namely, whether he was or was not in the service of, or in connection with the Board of Works, at the time of the election. They say that he was not, and their decision has occasioned universal surprise to all who believed themselves acquainted with the particulars of the case."

It is important to keep these things before the eyes of the people, in order to prevent the re-introduction of the system in this State,

and to show how little probability there is that any injury could be inflicted on our trade by works under such management, even with natural advantages as great as those of New York.

BOSTON AND WORCESTER RAILROAD.

The directors of the Boston and Worcester railroad respectfully report, that the

Amount of their capital stock is		$2,900,000 00
The amount expended to the 30th of December last, for construction was		2,914,078 08
The receipts of income during the year ending Nov. 30th, 1844, were,		
From fare of passengers	$234,634 21	
From freight	175,995 87	
Transportation of the mail	8,738 77	
Rents	7,044 75	
Interest	2,023 74	428,437 34
Balance of income undivided the preceding year		35,500 00
		$463,937 34
The expenditures during the same period were for repairs of road, bridges and buildings	49,157 93	
Of engines and cars	57,337 52	
For all other expenses	126,778 47	233,273 92
Two dividends have been made, viz:—		
July 1, 1844, 3½ per cent,	101,500 00	
Jan. 1, 1845, 4 per cent	116,000 00	217,500 00
Leaving a balance of income of		13,163 42
Miles run by locomotive engines		
With passenger trains	140,899½	
With freight trains	71,451½	
With gravel trains	8,273½	
Total miles		220,623½

From the prosperous state of the business of the country, and the satisfactory accommodations which have been provided for the transportation of both passengers and freight over this road, there has been a considerable increase in the business of the last year over that of any preceding year. This increase has arisen in part, from the extension of the business of the Western road, for the accommodation of which this corporation has made a very large expenditure of capital, but in a greater degree, from an increased activity of business, in those parts of the State which are specially accommodated by this road alone.

The number of passengers transported on the road during the year, including way and through passengers, was equal to **199,220** over the whole road. Of this number, **57,631** were passengers conveyed to and from the Western road; **41,101** to and from the Norwich and Worcester road, including those by the New York steamboat line; and **100,488** were passengers travelling exclusively on this road. These numbers show an increase in the aggregate of passengers compared with those of the preceding year, of **26,006**. The whole of this increase was in the local travel of this road, and that connected with the Norwich and Worcester road. In the travel to and from the Western road, there was a diminution of about **2,000** in the number of passengers; and as the rates of fare received by this road, from that class of passengers had been reduced, there has been a considerable diminution in that branch of income.

The whole amount of freight transported on the road was **126,853** tons. Taking into computation the distance of transportation, it was equal to **114,175** tons conveyed over the whole road. This quantity compared with the amount transported on the preceding year, shows an increase of **25,851** tons; of which increase, **13,741** tons was in the business of the Western road; **419** tons in that of the Norwich road; and **11,691** tons in the local business of our own road.

The earnings in the freight department during the past year, including the amount uncollected on the day of closing the yearly accounts, but subsequently collected, amount to **$198,820**. This is an increase over the earnings of the preceding year of **$34,793**. There was something more than this amount of increase in the earnings of the local freight business terminating at Worcester, and an increase of about **$3,000** in that which is connected with the Norwich and Worcester road. But in consequence of the reduced rates of compensation for freight transported to and from the Western road, although there has been an increase, as above stated, of **13,741** tons, in the quantity of that class of merchandize transported over the whole of this road, there has been a diminution of about **$4,000** in the compensation obtained for it. In consequence of the increase in the amount of freight transportation, there was an increase of **$20,033** in the expenses of this department. In consequence of the increased number of passenger trains, and some considerable charges for damages, occasioned by accidents, there has also been an increase of expenses of the passenger department. * *

	Whole am't.	Passengers.	Freight.
Repairs of Road	$49,157.93	24,579	24,579
Fuel	31,619.65	15,442	16,199
Repairs of engines	29,339.73	14,958	14,382
Other expenses of motive power	10,721.58	7,114	3,608
Repairs of cars	30,001.88	10,480	19,420
Wages, cars, oil, etc.,	46,262.16	17,917	28,445
General expenses,	21,329.48	11,749	9,571
Damage and loss	13,193.43	11,722	1,471
Road clearing	1,450.26	799	651
Special mail expenses	915.71	916	0
	$234,993.81	115,676	118,326

This statement, as well as all the statements of the business of the road, for some years past, shows an unusually large proportion of annual expenses, to the gross receipts. Such a result, occurring from year to year, notwithstanding the very large amount of business done on the road in both the passenger and freight departments, and the strict economy with which the business is conducted, serves to show the low rates of compensation charged on the business done. This is shown also by a comparison of the rates of fare and freight charged per mile, with the ordinary rates on other railroads in the country and in other countries, in corresponding circumstances.

This large proportion of expenses, to the receipts of income, has arisen to a certain extent, from the voluntary adoption by the directors, of what they deemed a liberal and wise policy, of encouraging the expansion and enlargement of the business on the route, by frequent trains and low rates of fare and freight. But it has been increased to a burdensome extent by the recent excessively low rates for passengers and freight from the Western road. The directors were of opinion, from the first opening of the road, that a policy which would afford the means of larger accommodation and benefit to the public, would be productive of ultimate benefit to the stockholders of the road. They have been always desirous of going to the extreme limit of reduction, which was consistent with the rights of the stockholders, and the duty of the directors, of obtaining a just and reasonable income on the great capital invested. But they believed that they had no right to sacrifice these interests in hazardous experiments, or in donations to the public. *

For the purpose of showing more fully than has been stated in the beginning of this report, the amount of business done during the year, ending on the 30th of November last, in the several departments, together with the earnings, expenses, and net income, the following table is presented. The statement shows not only the aggregate of business and profits in the several departments, but distinguishes under separate heads the joint business with the Western road, and that with the Norwich and Worcester road, from the local business of the Boston and Worcester road, so as to show the extent of the business and amount of income of each branch. * * * *

STATEMENT OF INCOME AND EXPENSES, FOR YEAR ENDING NOV. 30, '44.

	B. & W. road alone	To & from W'n R. R.	To & from N.&W.RR	Total.
FREIGHT.				
Tons carried one mile	1,381,128	3,201,444	441,298	5,023,870
Earnings	$93,833	$83,872	$24,135	$198,820
Expenses	32,525	75,408	10,393	118,326
Net income earned	58,358	8,394	13,742	80,494
PASSENGERS.				
Passengers carried one mile	4,421,497	2,535,749	1,847,941	8,805,187
Equal to through	100,488	57,631	41,101	199,220
Receipts	$134,839	$59,250	$40,545	$234,634
Expenses	58,347	33,463	23,866	115,676
Net passenger income	76,492	25,787	16,679	118,958
Mail, rent, etc.				8,739
Gross income and earnings,	235,732	143,052	64,680	442,193
Total expenses	90,872	106,871	34,259	234,002
Total net income	134,860	34,181	30,421	208,191

The *earnings* on *freight* are given above, and not the *receipts* on *freight*; which will account for the variation from the statement of receipts at the beginning of the report.

This statement shows that the net income of the business of this corporation during the year, amounted to **$208,191**, which is equal to **7⅛** per cent. on the capital stock of the corporation. It shows that the rate of profit on that portion of the business, which is done in connection with the Norwich and Worcester road, including the steamboat line, under the arrangement which has been alluded to, with the directors of that road, is less than on the local business of the road, the line being such that on account of the competition of other lines, and other modes of transportation, it must be done at low rates, or it would be transferred to other routes. It shows also that the rate of profit arising from the portion of the business which consists of the conveyance of passengers and freight, to and from

the Western road, is still much less; affording a very inadequate compensation, in proportion to the amount of the business, for the capital required for transacting it, and even for that proportion of the capital which was expended for the special accommodation of this part of the business.

Proposition submitted to the Directors of the Western Railroad, for the mutual regulation of the joint Fares and Freights.

1. Each corporation shall be entitled to the whole income earned upon its own road.

2. The rates of fare and freight, for the joint business of the two roads, shall be determined by mutual agreement between the two boards of directors.

3. In determining the rates of fare and freight for the joint business of the two roads, it shall be first ascertained what difference between their respective rates will afford to each corporation an equal net profit per mile, on each passenger, and each ton of freight transported (over the whole or any part of both roads,) taking into consideration the annual charges and the annual interest on the cost of each, with its appurtenances, and averaging these on the whole business of the respective roads. The rates established shall be such, as with a just allowance for this difference of annual expenses and interest, will give to each road an equal net profit per mile on each passenger of the same class, and each ton of freight of the same class.

4. For the purpose of ascertaining the said charges of the two roads for current expenses and annual interest, averaged on each passenger and each ton of freight carried one mile, for regulating the comparative rate of fare and freight on them for the year **1845**, an accurate statement shall be made of the business of each road in the year **1844**, which statement shall exhibit

1. The amount of freight transportation, estimated by the number of tons conveyed one mile, and the amount of passenger transportation by the number of first class passengers conveyed one mile, including also an allowance for second class passengers, equal to two thirds of the number so carried.

2. A statement of the current expenses of the year, including the cost of repairs of road, bridges, buildings, engines, and cars, and all charges for loss, damage, and general expenses. The charges for the passenger and freight departments of business, to be stated separately, and those which cannot be divided by a more equitable rule, to be divided between the two departments, in proportion to the gross receipts from passengers and freight.

3. A statement of the cost of each road, with the annual interest thereon. The interest to be reckoned at six per cent., except such part of the cost of the Western road as is defrayed by loans on State stocks, and Albany bonds, which shall be stated at the amount actually paid. The interest so ascertained on the cost of each road, to be divided between the passenger and freight departments, in proportion to the amount of receipts of income from passengers and freight.

4. These amounts being ascertained, the aggregate of the expenses of the passenger department on each road, including its proportion of general expenses, and also its proportion of interest, to be divided by the number of passengers conveyed one mile on the same road, ascertained as above prescribed; and the difference between the results, so obtained, shall be the difference in the rate per mile of first class fare to be established on the two roads, for the joint business during the current year. The difference between the second class rate to be in the same proportion The aggregate expenses of the freight department on each road, with the interest apportioned thereto as above described, to be divided by the number of tons conveyed one mile, and the result so obtained to govern the difference per mile, in the rates of freight to be charged on the two roads.

5. At the commencement of each succeeding year, similar statements to be made, of the business and expenses of the preceding year, with the interest, and divided between the two departments as above prescribed, and new results obtained, for regulating the difference in the rates of fare and freight, which each road shall receive for the joint business on their respective roads for the current year.

WESTERN RAILROAD REPORT.

The directors of the Western railroad corporation present to the stockholders their tenth annual report of the business of the corporation for the year **1844**, and of the condition of the road and its finances at the close of that year.

Inquiries have so frequently been made in reference to the capital, debts, and available means provided for the construction of the road, that it is feared some misapprehension may have existed among the stockholders on these subjects, arising from the brief and *general* manner of stating them in former reports. To obviate this inconvenience, it is now proposed to present more particular statements on these points accompanied with explanations by which they may all be clearly understood. This will be done under the heads of

I. Chartered capital,

II. *Nominal* means provided for construction,

III. Assets actually received out of nominal means, and *available for construction*,

IV. Debts contracted for construction,

V. Amount expended for construction,

VI. Sinking funds for payment of debts.

I. *Of the Capital.*

The capital authorized by the original charter was **$2,000,000**, and it was increased by **1,000,000**, by a subsequent act,—the State subscribing for that amount—making the chartered capital **$3,000,000**, one third owned by the State, and two thirds by **1121** private stockholders.

This amount has been all paid in or realized as follows, viz:

Amount paid in full, by stockholders on 26,734 shares	$2,673,400
The balance of the shares 3,266, were either abandoned to, or bought in by, the corporation, after there had been paid thereon	$40,193.20
Amount paid on the same by the corporation, to fill up the stock, and temporarily charged to "deferred account," being the actual cost to the corporation, $87.69 per shr., (now worth par),	286,406.80
	— 326,600
	$3,000,000

This is considering the shares on hand as cash, at **$87.69** The excess of that sum produced on sale, is available for construction; the construction account having been charged with more than that amount in interest, on account of these shares, on Dec. **31, 1842**, as per report of Jan. **7, 1843**.

II. *Of the* NOMINAL *means provided for the construction and equipment of the road.*

1. The chartered capital as above		$3,000,000
2. The State scrip or sterling bonds of the commonwealth, authorized by three acts of the legislature, and payable as follows, viz:		
April 1, 1868	£135,000	
October 1, 1868	337,500	
October 1, 1869	90,000	
April 1, 1870	180,000	
April 1, 1871	157,400	
	£899,900	$3,999,555.56
Of the amount authorized, £100 have not been issued.		
3. Bonds or scrip of the city of Albany payable as follows, viz:		
July 1, 1866	$250,000	
" 1, 1870	300,000	
" 1, 1871	200,000	
" 1, 1876	250,000	— 1,000,000.00
Total *nominal* means provided		$7,999,555.56

The whole of the scrip and bonds have been sold.

III. *Statement of the* ASSETS *actually received out of the* NOMINAL *means provided, and available for construction.*

1. Chartered capital paid in			$3,000,000
2. Proceeds of £380,800 State scrip, sold in England, from 1838 to 1841, at a premium—amount realized here—including premium and exchange	$1,838,911.96		
Less prem.	21,935.06		
Less exch.	124,532.46		
Paid to the sinking fund per acts of the legislature	146,467.52		
Available net,			1,692,444.44
3. Amount of balance of State scrip, £519,100, sold in this country at a loss, and subsequently to the above payments to the sinking fund	$2,307,217.82		
Less net discount on sale.	138,574.35		
Available net,			2,168,731.07
4. Am't of Albany bonds	$1,000,000		
Less net dis. on sale of same,	9,574.35		
And am't paid Albany sinking fund, per contract	100,000.00	— 109,574.35	
Available net,			890,425.65
Total assets available for construc'n,			$7,751,601.16
Viz: Chartered capital		3,000,000.00	
State scrip		3,861,175.51	
Albany bonds		890,425.65	— 7,751,601.16

To which will be added the amount to be realized on the sale of 3266 shares of stock, above its nominal cost of $87.69 per share, (without interest).

IV. *Of the* DEBTS *of the corporation contracted for* CONSTRUCTION, *and payable from* **1868** *to* **1876**.

Of the total amount of State scrip issued—**£899,900**—the part sold in England, is at all events payable there at sterling, say **£380,800** at **$4.44** is **$1,690,752**.

To which must be added the exchange for remitting the funds, at the rate it shall rule, at the maturity of this part of the scrip.

The balance £519,100 was sold in this country, reckoned and to be redeemed, *if here*, at $4.80, though sold at a discount;—with the right to the holder to receive payment here at that rate, on giving 60 days prior notice—or in England at sterling ($4.44) at his option,—this corporation giving him a separate agreement to that effect.

Of course, the actual amounts to be paid on both parcels, will depend upon the rate of exchange at the maturity of the several issues.

Estimating the whole at $4.80 for the pound, the amount to be paid on £899,900, will be, as stated in the last report—

Loan	$3,999,555.56
Exchange or its equivalent	319,964.44
	$4,319,520.00
Add Albany bonds	1,000,000.00
Total construction *debt* payable from 1868 to 1876	$5,319,520.00
For which there is provided in the two sinking funds, as of Jan. 1, 1845	389,210.17
Balance of debt to be provided for	$4,930,309.83

V. Statement of the entire amount expended for the construction and equipment of the road.

The expenditures for construction and equipment, in the year 1844, have been as follows:

OBJECTS.	Western rd. in Mass.	Albany rd. in N. York.	Totals.
	Dollars.	Dollars.	Dollars.
For masonry and graduation	44,364 31	6,542 01	50,906 32
Superstructure	7,433 14	.....	7,433 14
Bridging	1,644 07	.....	1,644 07
Depot Buildings, Fixtures, Aqueducts, etc.	30,537 23	3,019 21	33,556 44
Depot lands	5,842 00	4,550 75	10,392 75
Land damages	500 00	7,000 00	7,500 00
Engineering	.....	24 94	24 94
Engines	24,405 70	.....	24,405 70
Passenger cars	.....	.....	.....
Merchandize	37,306 83	.....	37,306 83
Fences	4,470 24	6 22	4,476 46
Ferry boat	.....	28 66	28 66
	156,503 52	21,171 79	177,675 31
Less iron rails transferred from Albany to Western r'd.	8,715 00	8,715 00	.....
	165,218 52	12,456 79	177,675 31

The total expenditures to January 1, 1845, *are as follows:*

Western R. Road	Construction.	Eng. & cars.	Total.
Prior to January 1, 1844	Dollars. 5,181,505 95	Dollars. 576,023 79	Dollars. 5,757,529,38
In 1844	100,019 04	61,712 53	161,731 57
	5,281,524 63	637,736 32	5,919,260 95

Albany and West Stockbridge Railroad.	Construction.	Total of both roads to January 1, 1845.
	Dollars.	Dollars.
Prior to January 1, 1844	1,753,530 28	7,511,059 66
In 1844	13,411 24	175,142 81
	1,766,941 52	7,686,202 47

The items prior to January 1, 1844, as given in the report of 1844, have been corrected from the books.

TRANSPORTATION DEPARTMENT.

The receipts from the business of the road in 1844, were as follows:

For passengers	$358,694 00	
" merchandize	371,131 84	
From other sources, mail, package expr's, rents, etc	23,926 88	
Total receipts		$753,752 72

The annexed table gives these items monthly.

The expenses on the same account for 1844, were as follows:

Repairs of roads & bridges	61,390 49	
" " engines	29,782 44	
" " cars	21,510 08	
" " buildings, tools, ferry boat, etc	11,538 33	
Fuel in engine and buildings and ferry boat	63,984 88	
Other transportation expenses	98,028 95	
General expenses	27,839 03	
Total expenses		314,074 20
The annexed tables show these items monthly.		
The balance gives the nett receipts		439,678 52
Of this amount, the whole interest of the permanent and temporary loans requires, as by the treasurer's books	287,977 49	
Paid to Mass. sink'g fund	40,000 00	
" Albany " "	10,000 00	
		337,977 49
Balance is the nett surplus Jan. 1, '45.		101,701 03
Since Jan. 1st a dividend of 3 per cent. has been declared, which on 26,734 shares, being all not owned by the corporation, is		80,212 00
Leaving a surplus carried forward the present year of		21,489 03

The annexed account of the treasurer presents his statement of the entire receipts and payments for the year, as of January 1, 1845.

The whole number of miles run by all the trains in 1844, was as follows:

For passenger trains		212,892½
For merchandize trains		255,376
For other trains, road repairs, wood, etc		31,699½
Total miles run		499,968

A table annexed gives the same monthly.

The expenses averaged upon the miles run give per mile 63 4-100

The whole number of passengers carried over the road during the year was:

Through passengers, 1st class	17,016½			
" " 2d "	7,314	—	24,330½	
Way " 1st "	140,868½			
" " 2d "	55,058½	—	195,927	
Total passengers			220,257	
Do. in 1843			200,965½	
Excess			19,292	

A table annexed shows the number of passengers monthly.

By reference to the tables of each year, it will be seen that the number of through passengers is stated in 1844 less than in 1843. This is mainly owing to the fact, that in the greater part of 1843, the difference between the through and way fare was so great, that way passengers, to a considerable extent, took through tickets, and were thus registered as through passengers. There was no inducement for such a practice in 1844.

The whole number of tons nett, carried one mile by the merchandize trains, was:

In 1844	11,166,704
In 1843	9,414,621
Increase	1,752,083

The whole tonnage is equal to 71,581 tons carried over the whole length of the road, 156 miles.

The number of miles run by merchandize trains in 1844 being 255,376. is equal to 1,637 trips *through*, averaging 43¾ tons each train.

The through freight from Boston to Albany in 1843, was 5,268 tons; in 1844, 6,764; increase, 1,496.

The amount of freight received at, and sent from Boston, in connection with the Western road, was:

In 1844	69,842 tons.
In 1843	56,376 "
Increase	13,474 "

The number of barrels of flour from Greenbush and vicinity to Boston, was

In 1844	154,413	
In 1843	123,366—	31,074

The whole number of barrels of flour sent from Greenbush to all stations, was

In 1844	297,403

The amount charged on all merchandize forwarded eastward from the Greenbush station, was

In 1844	$223,572
In 1843	167,087
	$56,485

The amount charged on merchandize forwarded from Greenbush eastward, in the month of January, for three years, was

In 1843	$6,622
In 1844	13,677
In 1845	20,216

To be continued.

MISCELLANEOUS ITEMS.

☞ A mention was made in this paper, some weeks since, of a new invention which promised to overcome the obstacles hitherto presented in the travel of Inclined Planes on Railroads. We had the pleasure of viewing the model in operation yesterday, in the great room of the Exchange, and what was done seemed to warrant the belief, that the inventor, Mr. Coleman, has accomplished an object much desiderated. A small locomotive, with but 1½ inch bore of piston, and 1½ inch stroke, drew after it a car loaded with fifty-six pounds of iron, up a plane placed at an elevation of six degrees, with perfect ease, and stopped at any point desired—moving backward and forward entirely at the will of the engineer.

Along the centre of the track of the plane, a beam was laid, on which were placed, at a distance of about an ⅛ of an inch apart, circles of iron, each one moving horizontally around a centre pin fixed to the beam. On the bottom of the locomotive an endless screw was fixed, the thread of which fell exactly into the vacant space between the circles, catching on at least three of them at once when the locomotive was fairly in motion. The screw was connected by a cog-wheel to the driving wheels of the engine, and derived its motion from them. It is easy to see that when in motion the engine will pass along regularly and steadily, by the motion of the screw, and that when it is stopped, each thread of the screw will rest against a fixed body—and the flanges of the engine wheels not permitting any motion to either side, the pressure is kept fixed and firm against the circles, which become then a sustaining power.—*U. S. Gaz.*

REDUCTION OF RATES.—Col. Elmore, in a letter to a Committee in Kershaw District, S. C. thus speak of the income of the South Carolina Railroads, and gives a striking illustration of the effect which a reduction of the rates of freight and passage has had in increasing the business and profits of the Company. He says: "Let facts speak—I give the profits of our Railroad for five years:

1840, Receipts were	-	$322,740:95
1841, " "	-	349,834:44
1842, " "	-	348,355:95

We then reduced freights nearly 50 per cent., and passengers' fares nearly - 40 " "

And yet our receipts were

1843, " "	-	$348,355:51
1844, " "	-	533,657:00

The first year of reduction, viz: 1843. we gained immensely in freights, but not enough to make up fully—but in 1844, our rates had become known, and our business has been immense.—*Ga. Mess.*

SHAMOKIN AND POTTSVILLE RAILROAD.—Mr. Kimber Cleaver, Engineer, who surveyed the route of the above mentioned Railroad, exhibited to us a beautiful draft of the route from

which we glean the following particulars: The Road will be 39 miles in length, and can be completed at a cost of $690,000, laid with an Iron Rail weighing 60 lbs. to the yard. The greatest rise is 73 feet to the mile. We shall refer to this road again. Want of room cuts our notice short this week.

The most powerful establishment I ever visited, is the Copper Rolling Mill of Messrs. Phelps, Dodge & Co. It will well pay a visit of the curious. The machinery is driven by three water wheels, two of them of enormous size. The balance wheel is some eighteen feet in diameter. This, you will readily see, would would take a pretty high building to revolve in. The rollers are said to be the largest in the country; they would be apt to hurt a person's feelings to get between them when under full headway. Some fifteen hundred dollars worth of copper is turned out per day in sheets, besides a large lot in copper bars of various sizes. A piece of copper some twenty-four inches long, twenty wide, and three inches thick, is put between the rollers and comes out a large sheet, any thickness desirable, from one inch down to the thickness of a wafer. This mill has not been in operation for a day or two past, owing to the freshet in the Naugatuck. Here are employed some thirty-five men.—*N. H. Courier.*

Iron Colliers.—We learn that a number of capitalists in Philadelphia and New York, propose constructing a number of Iron Steam Colliers, similar to those plying between New Castle and London, of about 700 tons burthen, to carry Coal by Sea from Richmond to New York and other Eastern ports. The trial made by the Errickson Propeller during the last season has demonstrated that Coal can be carried very cheap from Philadelphia by this mode of conveyance.—*Minor's Journal.*

Geology of New Hampshire.—The Geological survey of Dr. Jackson has disclosed an unexpected amount of mineral wealth in the "Granite State." In the town of Bartlett, an iron mine has been discovered, possessing ore of excellent quality and of inexhaustibe amount. The locality was formerly worthless; it has recently been sold for $10,000. In Eaton a vein of zinc ore was discovered, more abundant than that of Bristol, England. The mine will furnish zinc sufficient to supply all New England. At Warren, copper ore was found, of such character and in such quantity as to warrant mining. In Jackson a vein of tin was discovered. Other valuable metals and ores were found, showing that New Hampshire is rich in mineral treasures.

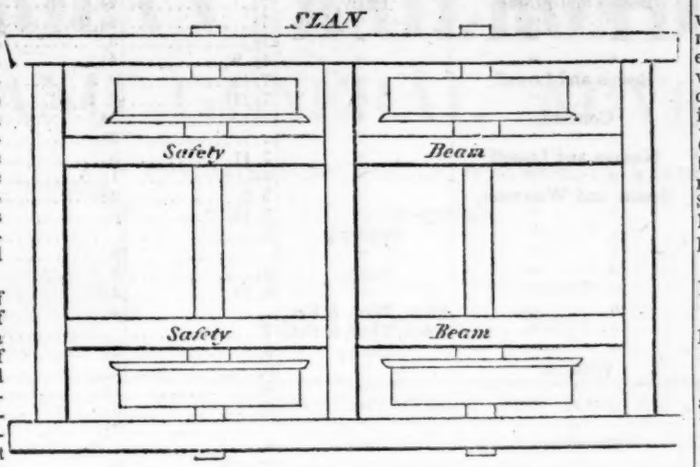
Such facts establish the value of geological surveys. Massachusetts was one of the first to authorize such a survey; and the proposition for the survey encountered no little opposition from the "penny wise and pound foolish"—from those dear lovers of "the people," who are unwilling to take a shilling out of their pockets, that a dollar may be put in.—*Hampshire Gazette.*

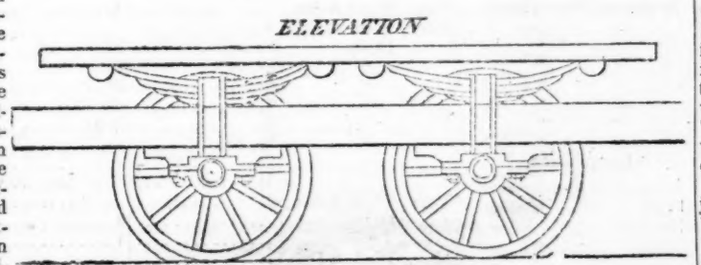
Locomotives and Steamboats in France.—It is officially stated that in 1842, there were in France 204 locomotives belonging to the different railroads, and 229 steamboats, representing a force of 35,000 horses, which conveyed in that year 996,826 tons of goods, and 2,515,991 passengers.—*Phil. Inq.*

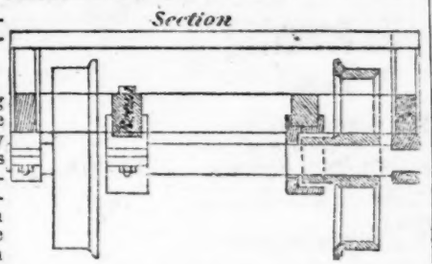
French Railways.—We have received several communications advocating the respective merits of Dover and Calais, and Folkestone and Boulogne, as routes from London to Paris, and building thereon arguments for or against the North (Calais) and the Boulogne Railways. As we make it a rule never to enter into these petty local controversies, but to treat all railway questions on the broad principle of public and general advantage, we should not notice these effusions had we not the hope of somewhat allaying the lamentable ill-feeling which has so long and violently existed between Calais and Boulogne. Whatever may have been the case formerly, what has taken place since the opening of the Dover Railway and the establishment of steamers between Folkestone and Boulogne, shows that Calais must submit to lose the greater part of its former London and Paris passengers, which the much shorter distance by Boulogne will certainly induce to prefer the latter route. This preference will also certainly be rather increased than otherwise when the projected lines of railway from both places will be opened. Calais will, however, be compensated, as we stated last week, by obtaining a large proportion of the traffic to Belgium, Germany, the Rhine, &c., which now goes by Ostend and Antwerp. Thus both places will have their share of traffic—that share which their natural position has given to each—and Calais will still continue to be one of the chief entrances to the continent, although Boulogne will gain a large accession of the direct Paris and London traffic.

As to the two companies, of the north line, and of that of Boulogne and Amiens, we cannot conceive how any rivalry, or other than the best feeling, can ever exist between them, for the whole of the London and Paris passengers and goods must go over 90 miles of the north railway—from Amiens to Paris—so that in fact they will have a reciprocal interest in each others welfare.—*Railway Times.*

KITE'S PATENT SAFETY BEAM.







MESSRS. EDITORS.—As your Journal is devoted to the benefit of the public in general I feel desirous to communicate to you for publication the following circumstance of no inconsiderable importance, which occurred some few days since on the Philadelphia, Wilmington and Baltimore railroad.

On the passage of the evening train of cars from Philadelphia to this city, an axle of our large 8 wheeled passenger car was broken, but from the particular plan of the construction, the accident was entirely unknown to any of the passengers, or, in fact, to the conductor himself, until the train, (as was supposed from some circumstance attending the case,) had passed several miles in advance of the place where the accident occurred, whereas had the car been constructed on the common plan the same kind of accident would unavoidably have much injured it, perhaps thrown the whole train off the track, and seriously injured, if not killed many of the passengers.

Wilmington, Del., Sept. 28, 1840.

☞ The undersigned takes pleasure in attesting to the value of Mr. Joseph S. Kite's invention of the Safety Beam Axle and Hub for railroad cars. They have for some time been applied to passenger cars on this road, and experience has tested that they fully accomplish the object intended. Several instances of the fracture of axles have occurred, and in such the cars have uniformly run the whole distance with entire safety. Had not this invention been used, serious accidents must have occurred.

In short, we consider Mr. Kite's invention as completely successful in securing the safety of property and lives in railroad travelling, and should be used on all railroads in the country.

JOHN FRAZER, Agent, JAMES ELLIOTT, Sup. Motive Power,
GEORGE CRAIG, Superintendant, W. L. ASHMEAD, Agent.

☞ A model of the above improvement is to be seen at the New Jersey railroad and transportation office, No. 1 Hanover st., N. York. ja45

NEW JERSEY RAILROAD AND TRANSPORTATION COMPANY.

Length of Road, 33 96-100 miles. Capital, $2,000,000.
JOHN S. DARCY, Esq., President. ROBERT SCHUYLER, Esq., Vice President.
J. P. JACKSON, Esq., Secretary. J. WORTHINGTON, Esq., Treasurer.

Leave New York, foot of Corutland street.	DAILY. A. M.	DAILY. P. M.	SUNDAY. A. M.	SUNDAY. P. M.
For Newark	9, 11, 12	2, 3, 4 3-4, 6, 7 1-2	9	4 3-4
" Elizabethtown	9, 11	2, 3, 4 3-4, 6		
" Rahway	9, 11	3, 4 3-4, 6		
" New Brunswick	9	3, 4 3-4		
Leave New Brunswick	6, 7 1-2, 11 1-2	8 3-4	11 1-2	8 1-2
Rahway	6 3-4, 7, 8 1-4, 12	4 3-4, 9 1-4		
Elizabethtown	7, 7 1-2, 8 1-2, 10 1-2, 12	3 1-2, 5		
Newark	7 1-2, 8 1-4, 9, 11	1 1-2, 4, 5 1-2, 7, 9 3-4	11 3-4	9 3-4
For New York.				

9 A. M. and 3 P. M. to meet the Morris and Essex trains, and 9 A. M. and 4 3-4 P. M. to meet the Somerville train, and for Philadelphia.

TABLE OF DISTANCES AND FARES.

	New York.		Newark.		Elizabethtown.		Rahway.		N. Brunswick.	
	Miles.	Cents.	Miles.	Cents.	Miles.	Cents.	Miles.	Cents.	Miles.	Cents.
New York			9 1-4	25	14 1-2	31 1-4	19 3-4	31 1-4	31 1-2	50
Newark	9 1-4	25			5 1-2	12 1-2	10 1-2	25	22 1-2	50
Elizabethtown	14 1-2	31 1-4	5 1-2	12 1-2			5	12 1-2	16 3-4	50
Rahway	19 3-4	31 1-4	10 1-2	25	5	12 1-2			11 3-4	37 1-2
New Brunswick	31 1-2	50	22 1-2	50	16 3-4	50	11 3-4	37 1-2		

TRAINS LEAVE	FOR	BY RAILROAD	DAYS.	A. M.	P. M.	MILES.	FARE.
Boston	Portland	Boston and Maine,	Daily,	7½,	2½,	109	$3 00
"	Somersworth	" "	"	7½,	2½, 3½,	69	2 12½
Portland	Boston	" "	"	7½,	3,	109	3 00
"	Somersworth	" "	"	4½, 9½,	4½,	40	.....
Boston	Lowell	Boston and Lowell,	"	7, 11,	2, 5,	26	75
Lowell	Boston	" "	"	7½, 11,	2, 4½, 5½,	25	75
Boston	Concord	Concord,	"	.....	3½,	76	2 00
Concord	Boston	"	"	.....	3½,	76	2 00
Boston	Nashua	Nashua and Lowell,	"	7, 11,	5,	41	.....
Nashua	Boston	" "	"	6½,	1½, 5,	41	.....
Boston	Worcester	Boston and Worcester,	"	7, 9,	2½,	48	1 25
Worcester	Boston	" "	"	7, 10,	6,	48	1 25
"	"	" "	Sundays,	7,	.....	.....	.....
Boston	Worcester	" "	"	.....	2,	.....	.....
"	Newton	" "	Daily,	9½,	3, 5,	.....	.....
Newton	Boston	" "	"	8, 10,	4,	.....	.....
Boston	New York via Norwich	" "	Mon., Wed. & Fri.,	....	4,	.....	.....
"	" " L. Island railroad	" "	Tues., Thur. & Sat.,	7,	.....	.....	.....
"	" " New Haven	" "	Daily,	9,	2½,	.....	.....
"	Albany	Western,	"	9,	2½,	156	6 00
Albany	Boston	"	"	8½,	1½,	156	6 00
Springfield	Boston and Albany	"	"	7,	3,	.....	.....
Boston	New York via New Haven	"	"	.....	2½,	.....	.....
Charlestown	West Acton	Fitchburg,	"	8,	1, 4½,	.....	.....
West Acton	Charlestown	"	"	7½, 10½,	5,	.....	.....
Boston	New York, via Sound steamboat	Boston and Providence,	Tues., Thur. & Sat.,	.....	4,	.....	.....
"	" " L. Island railroad	" "	Mon., Wed. & Fri.,	8,	.....	.....	.....
"	Providence	" "	Daily,	8,	3½,	41	1 50
Providence	Boston	" "	"	8,	3½,	41	1 50
Taunton	"	" "	"	8½,	3½,	.....	.....
New Bedford	Boston	" "	"	7½,	2½,	.....	.....
Boston	Dedham	" "	"	9,	3, 5½,	.....	.....
Dedham	Boston	" "	"	7½, 10½,	4½,	.....	.....
New York	Greenport	Long Island,	"	7½,	.....	95	2 25
Brooklyn	Hicksville & intermediate places	"	"	9½,	.....	26	56¼
"	Greenport " "	"	Tues., Thur. & Sat.,	9½,	.....	95	2 25
"	Hicksville, (Saturd'y to Suffolk)	"	Daily,	.....	4,	26	56¼
Greenport	Brooklyn, (Boston train)	"	"	.....	1,	95	2 25
"	" (accommodation do.)	"	Mon., Wed. & Fri.,	.....	.....	95	2 25
"	" & intermediate places.	"	Daily,	7,	1½,	26	56¼
Hicksville	Albany & Boston via N. Haven	Steamer,	"	6½,	.....	.....	5 00
New York	Middletown	New York and Erie,	"	8, 3,	.....	53	.....
"	New York	" "	"	6½,	3½,	53	.....
Middletown	Pottsville	Reading,	"	9,	.....	94	3 50
Philadelphia	Philadelphia	"	"	9,	.....	94	3 50
Pottsville	Newark	N. J. railroad and trans. co., [9 A. M. *and* 3 P. M., *connect with Morris Railroad.*]	"	9, 11, 12,	2, 3, 4½, 6, 7½,	9¼	25
New York	New York		"	7½, 8½, 9, 11,	1½, 4, 5½, 7, 9¾,	9¼	25
Newark	"		Sundays,	9,	4¾,	9¼	25
"	Newark	[9 A. M. *and* 4¾ P. M., *trains, connect with Somerville Railroad.*]	"	11¾,	9¾,	9¼	25
New York	Elizabethtown		Daily,	9, 11,	2, 3½, 4½, 6,	14½	31¼
Elizabethtown	New York		"	7, 7½, 8½, 10½, 12,	3½, 5,	14½	31¼
New York	Rahway	N. J. railroad and trans. co.,	"	9, 11,	3, 4½, 6,	19¾	31¼
Rahway	New York	" "	"	6¾, 7, 8½, 12,	4¾, 9½,	19¾	31¼
New York	New Brunswick	" "	"	9,	3, 4½,	31½	50
New Brunswick	New York	" "	"	6, 7½, 11½,	8¾,	31½	50
"	"	" "	Sundays,	11½,	8½,	31½	50
New York	New Brunswick	" "	"	9,	4¾,	31½	50
Philadelphia	New York	Camden and Amboy,	Daily,	7,	.....	91	3 00
New York	Philadelphia	" "	"	5½,	.....	91	3 00
Philadelphia	Bristol	Philadelphia and Trenton,	"	9,	.....	30	75
Bristol	Philadelphia	" "	"	.....	4,	30	75
Philadelphia	Baltimore	Philad. Wil. and Baltimore,	"	8,	4,	93	.....
Baltimore	Philadelphia	" "	"	9,	8,	93	.....
"	Washington	Baltimore and Washington,	"	9,	5, 11½,	41	2 50
Washington	Baltimore	" "	"	6,	5½,	41	2 50
Baltimore	Cumberland and inter. places	Baltimore and Ohio,	"	7½,	.....	.....	.....
"	Frederick " "	" "	"	.....	4,	.....	.....
Cumberland	Baltimore	" "	"	8,	.....	.....	.....
Hancock	"	" "	"	10½,	.....	.....	.....
Martinsburg	"	" "	"	11½,	.....	.....	.....
Harper's Ferry	"	" "	"	.....	12½,	.....	.....
Frederick	"	" "	"	.....	2,	.....	.....
"	"	" "	Sundays,	8,	.....	.....	.....
Ellicott's Mills	"	" "	Daily,	7½, 12,	4½,	.....	.....
Richmond	Petersburg	Richmond and Petersburg,	"	10¼,	1½,	.....	.....
Petersburg	Richmond	" "	"	5¾,	.....	.....	.....
Albany	Schenectady	Mohawk and Hudson,	"	8,	5½,	.....	.....
Schenectady	Albany	" "	"	9,	3½,	.....	.....
Albany	Saratoga	" "	"	7½,	2,	.....	.....
Saratoga	Albany	" "	"	7,	12½, 5,	.....	.....
Troy	Saratoga	Troy and Saratoga,	"	.....	3½,	.....	.....
Saratoga	Troy	" "	"	7½,	.....	.....	.....
Auburn	Rochester	Auburn and Rochester,	"	8½,	.....	.....	.....
Rochester	Auburn	" "	"	8,	3,	.....	.....
"	Buffalo	Rochester and Buffalo,	"	.....	3,	.....	.....
Buffalo	Rochester	" "	"	.....	.....	.....	.....
"	Falls	Buffalo and Falls,	"	9,	.....	.....	.....
Falls	Buffalo	" "	"	.....	1½,	.....	.....
Buffalo	Albany	Albany and Buffalo	"	8½,	.....	.....	.....